

A STUDY OF AUDIENCE REACTION TO THE
TELEVISION FILM "WHAT OF TOMORROW"

by

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B. B. A., Tulane University, 1941

A THESIS

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

Department of Speech

KANSAS STATE COLLEGE
OF AGRICULTURE AND APPLIED SCIENCE

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INTRODUCTION

December 1, 1950, Kansas State College received the first print of its publicity film, "What of Tomorrow". The film is a sound on film production in color. It was produced at a cost of \$10,400, and has a running time of twenty-eight minutes and forty-eight seconds.

"What of Tomorrow" was primarily produced to interest high school seniors in Kansas State College. Secondary purposes were twofold. It attempts to explain to the people of Kansas, the value of the facilities available at the college. It endeavors to give to the general public and alumni, a better understanding of Kansas State College, its aims and its purposes.

College officials have had only personalized comments as a basis for judging the effectiveness of their production. Qualitative program analysis tools and methods have been confined for the most part to the realm of the major radio and television networks. Their methods and equipment were not available to the general public.

This study was made in an effort to analyze the reaction of Kansas State College freshmen to the film, "What of Tomorrow":

1. To determine the strong and weak portions of this production.
2. To find and evaluate the audience's reasons for liking or disliking specific portions of the program.
3. To compare and evaluate the separate reactions of the male and female segments of the audience.
4. To discover and evaluate the overall acceptance of the film.

5. To provide Kansas State College with qualitative information for use in producing future films.
6. To contribute a qualitative program analysis study of scientific worth, as an addition to the limited supply of data in this field that is available.

REVIEW OF LITERATURE

Qualitative Program Research

Qualitative television program research is a new segment of a new industry. It borrows largely from radio and has adapted itself to the new medium. Being a visual medium, television studies are very closely related to motion picture studies of the same nature. The main significant differences would be found in the conditions of program viewing, and the costs of viewing. The field of programming has been one of the principal centers of qualitative television research.

Early History of Audience Evaluation Study

The earliest methods of audience evaluation studies were centered around the use of the questionnaire and the interview. These methods seldom yielded more than general opinions of the program as a whole (Hollonquist and Suchman, 6). Little could be learned about the specific causes of success or failure, for the simple reason that listeners could not recall their specific listening experiences. Invariably, those questioned would remember but a few of the numerous ingredients of a radio production. They would tend to stress the end of the program more than the beginning. Interrupting the program

at various points for questioning the audience would solve the problem of recall. However, this would destroy the listening experience. Thus the questionnaire method could not uncover sufficient detailed information to enable a producer to improve his show.

Non-Mechanical Techniques

The Schwerin Research Corporation, using the Schwerin System, began regular testing of radio and television programs in the fall of 1946. (Seehafer and Laemmar, 16). Under this system the audience members fill out detailed questionnaires on their personal and listening characteristics, hear a recording of the program, and react to it at frequent intervals using a score-sheet method. This is followed by a discussion period including audience comments on the program. The test director reads these comments back to the audience for decisive audience vote. This system entails the disadvantage of interrupted audience listening. The audience denotes its reactions on paper at varying signalled intervals throughout the program. The method offers the advantage of denoting degree of like or dislike of the program. The respondent can indicate whether he likes very much, only a little, is neutral, doesn't like it, or dislikes it considerably.

Psychologists were used by certain firms to evaluate and pretest program content. For over 10 years, Jack Armstrong programs have been tested in this manner. A psychologist

examines a preliminary outline for an entire series of Jack Armstrong adventures. Each individual program is read at least three times before it goes on the air. Frequently the program is read to small groups of children and their reactions and questions observed. Sponsor satisfaction has been the only known check on the success of this method.

The Listener Council type of audience reaction procedure has not achieved the success in the United States that it has in England (Phillips, et al., 13). Such councils as the Radio Council of Greater Cleveland have been effective for a time. There are few such councils in existence in the United States. Some believe that this method is of potential but undetermined value as applicable to program evaluation.

Mechanical Techniques

The Stanton-Lazarsfeld Program Analyzer method is probably the most publicized method existing in the field of radio and television program research. Tests can be made on small groups of people with a special recording device known as "Little Annie" or on larger audiences with "Big Annie." Each member of the audience presses a green button to denote when he likes what he hears and a red button when he dislikes. When he feels indifferent, neither button is pressed. "Little Annie" is a recording device consisting of a moving tape and twenty pens, each connected by a pair of push buttons. The pens record the second-by-second reactions of each individual of the test audience of 20 people. "Big Annie" can record

the attitudes of as many as 100 listeners at a single session (Seehafer and Laemmar, 16).

Unlike the questionnaire method, the analyzer method retains to a large extent the actual experience of listening. It permits a subject to record his immediate judgment at the time of listening. After the program is completed, the record can be used to remind the subject of his reaction to specific parts. Thus, the analyzer method enables study, in detail, of specific parts or aspects of the program. One of the most important limitations of the method results from the different meaning which may be expressed by the three reaction possibilities: Like, neutral, and dislike. Another disadvantage of the analyzer method for evaluating radio and television programs is the artificiality of listening conditions. Testing is usually undertaken in an auditorium rather than the normal place of listening - the listener's home.

The Hopkin Televote machine has been in use since 1940 in the pretesting of films (Seehafer and Laemmar, 16). Since 1947 the device has been used by Dr. George Gallup to pretest radio programs. The sample audience is brought to the test studio. Each person listens to the program and expresses negative or positive reaction to the program by turning a dial. These reactions are recorded on a continuously moving tape. Additional qualitative information is then gathered by questionnaires. Actual studies done with this machine were not available.

Ohio State University owns a machine similar in nature to the Program Analyzer. This machine works on batteries and

The University of Iowa has installed in a theater a similar testing mechanism to the one used in this problem. It's lack of portability would in many instances present a disadvantage in audience testing. No dissertations or theses using this mechanism have been completed (Harshbarger, 7).

Radio Station WHO of Des Moines, Iowa, at one time had its own program analyzer. However, this machine did not show "like" or "dislike" reactions separately. It charted only the difference between these two items, by drawing a single line. The station stopped using this machine twelve years ago (Whan, 22).

The University of Texas has installed in its "Radio House" an analyzer consisting mainly of 100 electric bulbs. These bulbs light only when audience individuals record a liking of the program being watched. Simultaneously, photographs are taken of the battery of lights. The photographs are developed and from the prints the number of "likes" are ascertained. Because of the mechanical nature of this operation, it would be very difficult to subjectively question an audience at its original assembly. As of December 25, 1954, no practical application of this machine had been made in the field of qualitative program analysis (Williams, 24).

Oklahoma University had in its possession a "converted lie detector" that was applicable to program analysis. This machine is called the PGR (Psycho-Galvanometer-Reactometer). Groups of up to 50 people can be tested for reactions on this machine. Dr. Sherman Lawton has been in charge of tests made

using this method. A letter of May 25, 1955, from Dr. Lawton stated that it was presently not possible to scientifically validate the interpretations of the variations that this machine produces. Dr. Lawton found the apparatus useful in determining points in a program about which he wished to question an audience. Whether the audience reaction was positive or negative cannot be determined until the audience is questioned. This method has an advantage in that no detracting thought or motion is required of the audience while the program is in progress. No theses on a master's or doctorate level have used the PGR technique as a basis for report.

The Psychogalvanometer (lie detector) has been used with claimed success in the testing of the effectiveness of advertisements. These studies are reported in a following section.

Infra-red Picture Technique

Infra-red motion or still pictures can be taken by means of a concealed camera with no knowledge of the fact on the part of audience members (Faison, 5). One of the chief advantages of this technique is that it avoids "guinea pig reaction." This reaction tends to be present when subjects know they are being tested or investigated. Another advantage of this tool concerns the reliability and validity of the method. A permanent record is obtained that can be checked, thus providing not only a reliability check, but also opportunity to test new hypotheses on previously photographed groups. The Air Force has used infra-red motion pictures to evaluate training films. The U. S.

Public Health Service is currently using this method to evaluate some of its health films. Essentially this technique calls for a number of judges to rate the filmed reaction of each member. As this is a new technique and few studies have been published, it would be very difficult to evaluate this method. It would seem that much would depend on the validity of the competence of the judges.

Audience Evaluation Studies

The Schwerin Research Corporation. This company began regular testing in the fall of 1946 and has tested well over 1500 commercial radio and television programs. A report has been made regarding the dual testing of a specific program. One of the groups tested was mailed score sheets to be filled out while listening to the program in the home. A second group was tested by regular studio methods. The comparison of the results of the two groups showed great similarity (Seehafer and Laemmar, 16). This and other experiments have given Schwerin Corporation confidence that television programs may be tested either in homes or regular testing studios.

Institute for Economic Education. Two films were submitted to a testing procedure using the program analyzer method by the Institute for Economic Education at Bard College, Columbia University (Sturmthal and Curtis, 19). They were "Valley Town", produced by the Educational Film Institute of New York University and "What So Proudly we Hail", produced

by General Motors. Thirteen groups, totalling 190 respondents, were used in testing "Valley Town." and twelve groups, totalling 160 people in testing "What So Proudly We Hail."

The investigators of "Valley Town" found the program analyzer a surprisingly sensitive instrument for eliciting the recall of part-by-part responses in interviewing. Women tested were found more indifferent throughout the program, fewer of them registering either likes or dislikes.

Results of analysis of the film, "What So Proudly We Hail," checked very closely with knowledge learned from copy testing of advertising. Appeals to human love of dogs, children and beauty, encoupled with positive audience identification with the actors contributed to a high degree of liking and few dislikes of the film. The investigators found the differences in sex so clearly classifiable that it was possible to predict which sex would show predominant liking for each part of the film, after the first five minutes on the chart had been studied.

Lazarsfeld-Stanton Analyzer. Hollenquist and Suchman (6) in an article, "Listening to the Listener," related their experiences with the Lazarsfeld-Stanton Analyzer. Profiles were explained for three types of radio programs: An Adolescent's Program, a Morale Program, and a Novelty Program. Audiences consisted of 49, 59, and 81 subjects respectively. The profile explanations covered the reactions of the subjects for each type of program from the beginnings to the ends of the programs.

Army Information and Education Division. Hovland, et al.,

(8) describe the program analysis work of the Research Branch of the Army's Information and Education Division. Extensive experimental studies were carried out on the first four of the "Why We Fight" series of orientation films prepared for the Division to explain the background of the war as well as briefer studies of a series of educational and general interest films. Methods used combined the use of the questionnaire, the interview, and the program analyzer. The analyzer equipment used was the Esterline-Angus portable recorder with 20 ink writing polygraph units.

These studies found considerable variability from subject to subject in the way in which the like and dislike buttons were employed, and that the instructions given in advance of the showing were an important feature in attempting to standardize the pattern of response. Differences were found in comparing analyzer reactions with interview and questionnaire results. It was concluded that differences in the relative evaluation accorded different instances and scenes by the two methods did not necessarily mean inconsistency in individual judgment, since the two techniques may measure somewhat different things.

Williams Study. In 1951, Donald Williams (23) submitted his "Study of the Influence of the Announcer Upon Audience Reaction to Three Types of Programs" for the degree of Doctor of Philosophy at the State University of Iowa. This thesis did not attempt to analyze a program for its own merit. Its purpose was to isolate the effect of the announcer as a person-

ality in three different types of programs. The Williams Study is the only previously completed dissertation on a graduate level that entails the use of the Whan Analyzer.

Psychogalvanometer Study of Advertisements. In an effort to measure the effectiveness of advertising, Eckstrand (4) tested an audience of 48 people using a Psychogalvanometer. Close agreement was found between galvanic changes produced by a series of pancake advertisements and the sales effectiveness of these advertisements. It was concluded that the study added positive evidence in behalf of the hypothesis that under properly controlled conditions, the effectiveness of advertising material can be predicted by the Psychogalvanometer method. This hypothesis was further strengthened by a series of extensive but less carefully controlled studies summarized by Wesley, (21). The technique proved slow and expensive. Although accepted as effective for evaluation of advertisements, it would seem that more effective interpretation of the galvanometer's recordings must be perfected before it could be used to greatest advantage in the audience analysis of a program.

Infra-red Photographic Study. Infra-red motion picture photography under carefully controlled conditions was used in a recent study of Air Force training films. By means of a technique developed in the study, estimations were made as to how well a message was getting across. This was done by analyzing the filmed record or reactions of each member. Complete details of the study were not available (Faison, 5).

Summary of Literature

Qualitative television program research techniques have progressed from the ineffectual questionnaire to advanced present day techniques of combining the questionnaire and interview with mechanical analysis. A new technique, using infra-red photography, has been developed and may prove of great value.

Today it is believed possible through systematic audience research to predict the success or failure of a television or film program and to make recommendations for strengthening a program.

From a standpoint of commercial prominence, the Stanton-Lazarsfeld Program Analyzer Method and the Schwerin System are the leading techniques used in the field of qualitative program analysis. These techniques are employed respectively by the Columbia Broadcasting System and the National Broadcasting Company.

Hovland's, Study of Mass Communications, seems the most comprehensive work of its type published. Hovland's technique included the mechanical analyzer, the questionnaire, and the interview.

Qualitative program research has made great progress within the past fifteen years. This progress seems largely due to the advent of mechanical instruments and improved research techniques.

No previous study of a program of comparative length to "What of Tomorrow," that was devoted primarily to a promotional

purpose could be found. Commercial studies of programs over 15 minutes in length were made for the most part on programs produced primarily for enjoyment. Non-commercial studies have dealt mainly with programs of an educational nature. Thus the results of this study should prove an interesting addition to the now available literature in the field of qualitative program research.

MATERIALS AND METHODS

General Method

The method used in this study consisted basically of a continuous registering of the expressed likes and dislikes of the selected audience for every instant of the viewed program. Immediately following the program the audience was questioned as to reasons for the likes and dislikes they registered to the specific portions of the program, on which large numbers of the audience agreed.

Various charts and graphs were prepared to facilitate the interpretation of the data. The Whan Audience Analyzer was the basic instrument used in the collection of data for this study (Plate I).

Description of The Whan Analyzer

The Whan Analyzer was built by the engineering staff of Radio Station WIBW, Topeka, Kansas, according to specifications supplied by its designer, Dr. F. L. Whan, in the year

EXPLANATION OF PLATE I

Close-up of the graphic instrument component
of the Whan Program Analyzer

PLATE I



1950 (Whan, 22). Following are Dr. Whan's basic assumptions about the machine's value:

1. The machine gives rapid, easy and coincidental tabulation of conscious "likes" and "dislikes" of what is being seen and heard.
2. The machine permits recording of audience's "likes" and "dislikes" with "a minimum of" disruption of attention from the program.
3. Instantaneous tabulation permits, within the least possible lapse of time, questioning of the audience as to points of agreement and disagreement. Thus the machine enables the maximum control of time that is possible in questioning by the "aided recall" method.

The central unit of the analyzer consists of an Esterline-Angus recording milliammeter. Two rolls of calibrated paper tape are so situated that the tapes may be driven at a constant rate of speed across the face of the unit. A wet ink recording pen rests on each tape.

Connected to the central unit by means of electrical cable are one hundred stations. Each station consists of a small metal box about the dimension of a package of king-size cigarettes. On the top of each box is mounted a toggle switch. This switch may be pressed to either the left or the right, when pressure is released the switch returns to a central position.

When switches are pressed to the right ("like" reaction) the flow to one of the ammeters is increased and the marking pen is deflected a distance proportionate to the number of switches pressed in that direction. When switches are pressed

to the left ("do not like" reaction) current flow to the other ammeter is increased and that pen is deflected. When no switches are pressed in either direction, neither pen is deflected.

Deflection of the pens may be adjusted so that records may be made in either terms of the total number of persons pressing the switches in each direction, or in terms of the percentage of the total audience pressing switches. In the present study all records are made in terms of number of persons.

The speeds at which the tapes are driven can be varied by an adjustment of gear ratio. In the present study a speed of three inches per minute was used at all times.

Tests by the engineering staff which built the analyzer show an over-all mechanical recording error of less than 1.0 per cent.

There are no other portable "Whan Program Analyzers" in operation at any graduate school throughout the country. No independent radio or television station is presently known to be using the method of analysis in this study (Whan, 22).

EXPLANATION OF PLATE II

A group of fifty girls reacting to the test
program, "What of Tomorrow"
(Note toggle switches in hands)

PLATE II



Description of Test Audience

Five hundred and seventy-five freshmen boys and girls attending Kansas State College comprised the test audience used in this study. The test audience was gained through eight separate showings of the program during the time period of December, 1954 through March, 1955. The male audience was composed of 391 boys tested at four separate showings of the film. The first three groups, hereafter designated as Groups 1, 2, and 3, consisted of 100 boys each. Group 4 consisted of 91 boys. The girls were tested in four separate showings: Group 5 consisting of 60 girls, Groups 6 and 7 each consisting of 50 girls, and Group 8 consisting of 24 girls. Expressed in percentages, 68 per cent of the audience was male, 32 per cent was female.

The boys tested were enrolled in either the Oral Communications I course or the Written Communications I course. The girls tested in Group 5 were similarly members of one of these classes. Groups 6 and 7 were freshman girl residents of Southeast Hall dormitory. The members of Group 8 were residents of Northwest Hall, a freshman girl's dormitory.

Procedure for Testing Group Reaction

On entering the testing site, each member of the audience found a metal switchbox on the seat of his chair. (Plate II) Identical instructions were read aloud to each group before the showing of the film. On the completion of these oral instruc-

tions, an uninterrupted showing of the film was completed while the audience analyzer was recording the audience's reactions.

Strong and weak reactions were noted as to time of occurrence, and film scene or sequence. This was accomplished by synchronizing the Whan Analyzer with a timed script of the film (Appendix B) while the showing was in progress.

At the end of the showing, a form was distributed to each member of the audience (Appendix A). Identical instructions for completing this form were read to each group (Appendix A). If a member of the group felt that he had registered a given reaction to a mentioned scene, he was asked to explain in writing his reason for reacting.

Report on Use of Toggle Switch

Holding and operating a switch while simultaneously watching a program, was a new experience for the members of the audience. An attempt was made to ascertain how much the switch "bothered" the audience. Group 4, composed of 91 boys, and groups 6, 7, and 8, totaling 124 girls, were asked at the completion of the program the question, "Did the switch bother you?" These answers were recorded by the group members on paper forms, and collected. Seventy-six per cent of the boys and eighty-six per cent of these girls reported that "The switch did not bother me." Only 24 per cent of boys and 14 per cent of the girls reported being bothered at any time by the switch. (Appendix C - Table 3)

Validity of Sample

In view of the fact that "What of Tomorrow" was designed primarily to inform and influence high school seniors, a test audience of high school seniors would seem desirable.

On investigation, it was found that for the most part, throughout the state of Kansas, the public schools had set aside specific dates for such showings. Because of the geographical spread of Kansas high schools, and because of the specified date factor, obtaining a representative sample of Kansas high school seniors was not feasible. Kansas State College freshmen were used instead.

College freshmen attending Kansas State College represent a cross section of high schools throughout the state. Usually, on a three months to a year age increment exists between high school seniors and college freshmen. This age increment would not seem to invalidate the findings of this study. However, two big differences exist between high school seniors and these college freshmen. College freshmen have experienced much of the material shown in the film. Such experience might influence the evaluation of this college film.

Secondly, the audience used had committed itself to attend Kansas State College. This very commitment may have acted as an influence on acceptance of the film. However, such commitment would probably act as an influence on any one portion of the film to the same degree that it would act on another portion. Any differences in reaction to individual portions of the film

would not be due to such commitment. Kansas State College freshmen represent the type of high school graduates who have an interest in the type of education to be gained at Kansas State, and the type of high school senior for whom the film was produced. In this respect, the use of freshmen enrolled for their first semester at Kansas State College as the test audience, may have provided a better test audience for the study than would a random sample of all high school seniors in Kansas.

As the audience used for testing the program could not be selected completely at random, the sample could not be proved reliable within statistical limits. However, certain analyses seem to indicate that the findings are similar to those that a random sample of freshmen attending Kansas State College would produce.

On analysis, the sample seems to some degree representative on a basis of:

1. The high schools of Kansas.
2. The curriculum in which Kansas State freshmen are enrolled.
3. The breakdown by sex of Kansas State College freshmen.

Analysis of the audience shows it to include one or more representatives from a total of 241 public and parochial high schools in the state of Kansas. Students from 53 out-of-state high schools, representing seventeen states and two foreign countries were included in the sample.

During the first semester of the year 1954-55, college

freshmen were enrolled in 82 curricula (14). All but 13 of these curricula were represented in the audience sample. Of the curricula not represented, seven had only one freshman enrolled. Three of these curricula had two freshmen enrolled and the remaining curriculum had five enrollees. The total of unrepresented students on a curriculum basis was only 1.6 per cent of the freshman class.

The sample is of reasonable proportionateness on a basis of sex of respondents.

Inspection of registration data of the last five and one-half years shows the ratio boys to girls varying from 2.2 to 3.0. The sample audience used (391 boys to 184 girls) shows a 2.2 to 1 ratio. (Appendix C - Table 4) This ratio was followed in an effort to aid in attaining some element of a proportionate sample.

Preparation of Charts and Graphs

On completion of the testing, eight separate "Like" charts (one for each group tested) and eight "Do Not Like" charts were available. Data from these charts were combined so that the audience could be analyzed in three groupings:

1. Freshmen boys
2. Freshmen girls
3. Total audience

Raw figures of the "Like" and "Do Not Like" reactions were converted to percentages. These percentages were charted on line graphs for ease of analysis.

From "Like" and "Do Not Like" reactions charted by the Whan Analyzer, a third set of figures, "Neutral", was obtained. "Like" and "Do Not Like" percentages were totalled and subtracted from one hundred per cent (100%). The remainder was used as the "Neutral" figure. A neutral percentage figure signifies the total per cent of the audience which refrained from registering a "like" or "do not like" reaction. A percentage figure for a specified second of the script is known as the "neutral" audience figures for that instant.

Four separate graphs were prepared from the original data. They can be found in Appendix B.

Questioning of Audience

A time restriction of fifty minutes per showing restricted audience questioning at the end of the film to a minimum. Length of time available for questioning varied with audiences from three to ten minutes. Because of this limitation, it was impossible to ask all questions of all groups. The following tables identify specific scenes about which each audience was questioned: Table 5, Table 6, Table 7, and Table 8 in Appendix C. The procedure by which this data was obtained is shown in Appendix A.

DISCUSSION AND RESULTS

Procedure

Separate analyses were made of the data from the question-

naires and from the analyzer chartings of the audience's like and dislike reactions. The questionnaire data was then analyzed in conjunction with the data from the analyzer chartings.

Analysis of Audience Questionnaire

The tables compiled from the data obtained from the audience questionnaire, Tables 5, 6, 7, and 8, can be found in Appendix C. A breakdown of 29 groups' reactions is shown in these tables. Male group reaction comprises fourteen of these groups and the remaining fifteen groups are made up of the reactions of the female audience. These tables represent the audience's tabulated explanations for registering a like or dislike to specific scenes. The "per cent explaining" figure was derived by comparing the number of written explanations received for a like or dislike reaction to a specific scene with the maximum number of people who indicated like or dislike on the analyzer chart at any instance in the scene.

The "per cent explaining" figure ranged from 70 per cent to 140 per cent of all scenes for which the audience was questioned. A spread of this extent would seem to indicate that an "aided recall questionnaire" used alone would not be an accurate method of determining the percentage of an audience liking or disliking individual portions of a program this length.

Reasons for the wide range of variations in percentage of written explanations over recorded percentages are unknown.

Some of the factors to be considered are: the personality of the individual questioned, time allotted for questioning and answering, memory error of the group, and group cooperativeness in answering questions.

Effort was put forth to control the previously mentioned factors with one exception: the memory errors of the group, which was an uncontrollable factor. The possibility of significant error in the "aided recall" method is accepted in both the fields of Statistics and Psychology (Boring, 1). In view of the fact that an effort was made to control other factors, it would seem that memory error was the chief cause of the wide range of variation found in the percentages of recorded likes and dislikes giving explanation.

The highest percentage of explanation among the girl groups amounted to exactly twice the 70 per cent figure of the low group. The highest figure for the boys, 123 per cent is $1\frac{1}{2}$ times the lowest, 81 per cent. These figures could mean one of several things:

1. That the boys comprising the audience experienced less memory error than the girls.
2. That the girls were more reticent than the boys towards moving the toggle switch.
3. A combination of the above two factors.

Ten of the fifteen groups of girls questioned showed a percentage of explanation figure of more than 100 per cent. Six of these groups showed a percentage figure of more than 123 per cent, the highest figure recorded by a boy's group.

In the case of boys of the 14 groups, seven turned in percentages under 100 per cent, one was exactly 100 per cent, and five of the remaining six groups reported percentages ranging from 104 per cent to 110 per cent. These figures further support the presence of recall error mentioned in the preceding paragraph.

Examination of Fig. 4 shows a consistently higher neutral reaction for girls than for boys. Between script timing of minutes there is an average difference of more than 12 per cent (12.46%). Yet, the two lines follow a surprisingly consistent pattern. This data gives further evidence of a tendency of the girls towards reticence in the use of the toggle switch.

Analysis of Charts in Conjunction with Questionnaire

Weak Scenes. The weakest portion of the film is shown by Fig. 1 in Appendix B to be script-time period 22:10 to 24:30. The script shows this to be the scene hereafter designated as the Discussion Class Scene. This was the only portion of the film where a greater percentage of the audience was recording a dislike of the film than was registering a like reaction. This can be observed by comparing the total likes and dislikes between the period 23:53 and 24:23. Likes averages 26 per cent for this period while dislikes were at 28 per cent. The neutral audience averaged 46 per cent for this period. The audience of boys found the Discussion Scene boring (35 per cent for explanations), unrealistic (25 per cent), didn't like subject

matter (16 per cent), poorly acted (11 per cent), and lengthy (8 per cent). The audience of girls found the scene boring (54 per cent of explanations), unrealistic (19 per cent), didn't like subject matter (16 per cent), and lengthy (47 per cent).

The Home Economics scene might be judged the program's second weakest (Appendix A, Table 1; Appendix B, Figs. 1 and 3; Appendix C, Table 8). In this scene, script-time 12:15 through 13:40, total dislike rose to 13 per cent. The total male dislike rose to as high as 17 per cent. The girls' reactions were not as negative; an average of only 5 per cent did not like this scene. Total average like reaction for this scene was only 40 per cent. The like percentage for the boys dipped to 28 per cent. The male average like reaction was 33 per cent. The average neutral percentage figure for the total audience was 48 per cent. These figures seem to indicate that masculine response was mainly responsible for the weakness of the scene.

The program's greatest deviation between like percentages of boys and girls (Appendix C, Fig. 20) was found in this scene. The girls average like figure proved 17 percentage points higher than that of the boys average figure of 33 per cent. This marked difference further shows the weakness of this film to be centered in its lack of interest to the male segment of the audience.

This scene showed sharp contrast with the Civil Engineer-

ing scene where the problem of maintaining the interest of both sexes was very efficiently handled. The Home Economics scene would be considered the film's second weakest. To make a scene of this nature successful, masculine appeal of some form must be inserted.

Dave's discussion with his roommate (Script-time 5:00-6:30) might be considered the film's third weakest. The average total like figure for this scene was 36 per cent. The average dislike figure was 14 per cent. The neutral audience averaged 50 per cent. (Tables 1 and 2, Figs. 1 and 4) The overall reaction pattern showed a lowering and levelling off of interest towards the center of the scene. There is an increase of interest at the end of the scene. Forty-five per cent of the dislike explanations (Table 8) show "unhappy associations." Another 45 per cent of explanations felt that either the scene was "unrealistic" or was "poorly acted." The scene seems weak in both subject matter and in quality of production.

Judged from the audience's reactions, the ROTC scene (script-time 16:43-17:15) would be considered a weak scene. Total dislike for this scene reached 21 per cent, the second highest of the film (Table 1, Fig. 3). Dislike by the male audience reached a high of 29 per cent (Table 8). Girls did not feel so negative. Five per cent dislikes was the highest percentage figure registered by the girls while percentage of likes reached as high as 50 per cent. It is interesting to note that while the boys registered high dislike, percentages

of likes stayed in the 39 to 45 percentile range. Fifty-three per cent of the boys explaining dislike stated, "I don't like ROTC (reaction to belonging to ROTC unit)." Seventeen per cent object to the time consumed by ROTC training. On the other hand, 26 per cent of the explanations received from girls liking this scene were interested in "why boys hate ROTC."

An interesting problem in program analysis is noted here. Seventy-nine per cent of male dislike explanations received seem to have been reaction to the scene's subject matter rather than to the quality of scene production. This could be somewhat compared to the analogy of an audience booing a villain. Might they really like the scene and dislike the villain?

Experience seems to have influenced the liking of this scene by the male members of the audience. Male reaction to this scene might not prove typical of the reaction of high school male seniors. This is the only portion of the film where a prediction of this type could be made.

Two of the film's four weakest scenes used "discussion" as their central theme. One scene depicted a class discussion in progress, the other an informal conversation between two roommates at college. While skilled handling of a "discussion" scene of one of the types cited might create high interest, it would seem prudent to look on "discussion" as inherently difficult to produce interestingly.

Strong Scenes. Unquestionably, the Sports and Recreation scene (script-time 17:30-19:30) was the strongest section of the

film in terms of audience interest (Figs. 1, 2, 3, 4, and Tables 1, 2). The total like percentage rose to 79 per cent (the program's highest) during a varsity football game. Total dislike never exceeded 7 per cent and dropped as low as 4 per cent. Total percentage remaining neutral, reached its lowest ebb of 16 per cent during this scene.

Of particular interest was the enthusiasm of the freshmen girls. Their high percentage of "like" was 80 per cent. Their percentage of dislike dropped to as low as one per cent. Analysis of explanations suggests that in addition to interest in sports, school spirit was a strong factor (Table 7).

The Civil Engineering scene (script-time 11:28-12:13) was one of the film's strongest. The scene was almost identically liked by both boys and girls (Table 1 and Fig. 2). Data showed a very low dislike percentage (Fig. 3) and a low percentage of neutral audience (Fig. 4). This scene suggests the value of humor and sex interest (Appendix D and Table 7) in making a normally academic subject interesting. It seemed particularly noteworthy that a subject basically of academic interest would be judged so highly.

The singing and playing of the Alma Mater accompanied by campus scenery seemed to provide a strong and fitting program ending (script-time 27:45-28:45). Total average like for this scene was 64 per cent. The girl's like percentage reached 88 per cent at the film's end (their high for the entire program). Girls averaged 18 percentage points higher than boys in like

reaction to this portion of the program. Explanations as to the girls positive reaction (Table 9) were divided: "Fitting close," "school spirit," and "moving scene" were among the major explanations.

The Varsity Dance (script-time 19:05-20:15) was considered among the strong scenes in spite of a relatively high dislike registered. Negative reaction averaged 13 per cent for this scene. The boys reached a high dislike of 18 per cent and the girls a high of 15 per cent (comparatively strong for the girl audience - Fig. 3). However, while the Varsity Dance followed Sports (the film's strongest scene) in sequence and did incur a good percentage of dislike, it still showed an average total liking of 62 per cent. The neutral audience was at its second lowest level for this scene. The average neutral figure was 25 per cent (Table 2 and Fig. 1).

Analysis of explanations of dislike (Table 8) for the dance scene divulged interesting insight into the audience. "Unrealistic" and "poor dialogue" were the prominent explanations of the dislike, (53 per cent of boys and 67 per cent of girls explaining). On the other hand, "Realism" was the leading explanation for like reaction to this same scene, accounting for 41 per cent of the explanations (Tables 7 and 8).

The scene was successful in stimulating both the male and female segments of the audience, although both praise and criticism of the scene suggests that similar reactions might not be forthcoming from high school seniors.

Of the film's four strongly appraised scenes, three of these (Sports, Dance, Alma Mater) dealt primarily with recreations and school spirit, purportedly by-products of a college education. The remaining scene, Civil Engineering, used humor combined with sex interest to attain its high like audience. Judging from the audience tested, giving academics a secondary role and "sugar-coating" an academic scene, are both very successful techniques for attaining audience interest.

In producing a film of this type it might be justifiable to conclude that scenes involving recreational activity tend to create strong audience interest. However, it would seem important to bear in mind the purpose of the program. In this instance, the program's main purpose was to interest students in coming to Kansas State. To determine the degree to which strong interest in recreational scenes of college life influence a student in his choosing of an institution, would require separate research.

Sharp Rises in Dislike Reaction. Three major sharp rises and two minor sharp rises were noted as to the audience's dislike of the program. The transition to the ROTC scene accounted for the sharpest rise of dislikes in the film. The rise started at 16:43 script-time. Within a time lapse of 10 seconds, total dislikes rose from 11 per cent to 21 per cent, representing proportionately, a near doubling of dislike. This reaction was strongly male as female reaction was low for this period (Table 1 and Figs. 1 and 3).

A second major increase in dislikes marked the transition

to the Discussion scene. The dislike percentage figure rose from 9 per cent to 18 per cent in 30 seconds (script-time 22:15-45). The dislike audience was proportionately doubled. As previously mentioned, the importance of this increase would have to be weighed in light of the fact that it is not strongly believed that high school seniors would react in this manner.

A third sharp major increase was found on transition to the Varsity Dance scene. In a lapse of 30 seconds (script-time 19:05-35) dislike rose from 5 per cent to 11 per cent.

A minor sharp increase in dislikes took on added importance because of its inference on the influence an inanimate object (Dave's pipe) might have in influencing audience reaction to a specific scene. During the scene in Dave's room (script-time 1:00-1:30) dislike rose from 7 per cent to 12 per cent. Besides a large number of explanations of "unrealistic" and "boring" (Table 8), 27 per cent of the male audience explaining, offered one of two objections. Either they "didn't like pipe smoking" or they "didn't like to see a college boy smoking a pipe." It is felt that in program production planning, the pipe smoking was pictured in order to motivate audience acceptance. It would seem a simple matter to delete Dave's pipe smoking and win back this lost audience.

The narrator praised the faculty, starting at approximate script-time 25:37, and a minor sharp rise occurred. Total dislike rose from 9 to 13 per cent within 15 seconds. Boys dislike rose as high as 16 per cent in this instant, while the

percentage figure for girls remained constant at 4 per cent.

Transition to: the ROTC scene, the Discussion scene, and the narrator's praise of the faculty, all caused sharp increases in dislike of the film. When transition from each of the above scenes occurred, a sharp decrease in dislike was shown. This occurrence would seem to validate the negative feeling felt toward these scenes.

Sharp Decreases in Dislike Reaction. Three sharp major decreases and one sharp minor decrease in dislike occurred during the course of the program. When the scene changed from ROTC to Sports, the total dislike percentage dropped from 12 per cent to 6 per cent in 15 seconds. This represented a proportionate loss of one-half of the dislike audience.

On transition from the Discussion scene (script-time 24:30) the total dislike percentage figure dropped from 25 per cent to 13 per cent in less than 30 seconds. This is believed to have been the program's sharpest major drop in dislike and occurred on transition from the film's weakest scene.

Within the Varsity Dance scene between script-times of 20:00 and 20:30 the dislikes dropped from 13 to 8 per cent in 30 seconds. This marked a transition scene within a general scene. The transition was from conversation to dance music.

A minor, but sharp, decrease occurred at approximately 24:45 script-time. The dislike reaction invoked towards the narrator's praise of faculty members fell almost immediately when the subject was changed.

Two of the sharpest rises in dislike occurred on transition to the ROTC and Discussion scenes. When transition occurred from these two scenes, the film's sharpest decrease in dislike occurred. This helps to validate the strength of negative audience feeling to these scenes.

Sharp Rises in Like Reaction. Two of the three sharp rises in the percentage of total likes figures occurred on scene transitions. A sharp rise occurred when the Civil Engineering scene began (script-time 11:30). There was a rise of 26 points in the percentage of total likes figure within a time interval of 30 seconds. The percentage figure jumped from 54 per cent to 73 per cent. (Table 1 and Fig. 1) When the ROTC scene changed to Sports at approximately 17:20, script-time, there was an 11 point increase in the total like percentage figure that took place during a 10 second lapse of time.

The third sharp major rise in the liking of the program occurred at approximately 2:13 script-time. Here an attractive girl appeared in conjunction with humorous narration. In 15 seconds, total likes jumped from 42 to 52 per cent. Like the Civil Engineering scene, this scene combined sex interest and humor -- seemingly, a good formula for increasing interest in the audience tested.

Minor, but sharp, rises occur at 6:30 script-time when Dave blows dust off his book, and at 4:30 script-time when Dave finds a flunk slip in his post office box.

The tendency of major sharp rises in like reaction to occur on transition, indicates the audience's difference of

feeling towards the different subjects stressed in the program.

Sharp Decreases in Like Reaction. Four sharp decreases in the liking of the program were noticed. The sharpest fall in total likes for the entire film started at approximately 12:08 script-time. This drop occurred on transition from Civil Engineering scene to the Home Economics scene. In a time interval of 30 seconds the percentage of total likes dropped 27 points (Fig. 1 and Table 1).

Transition from Camp Wood to the Discussion scene found a sudden drop starting at approximately 22:05 script-time. Total like percentage figure showed a loss of 12 points in 15 seconds.

A sharp drop occurred on transition from Danforth Chapel to Dave X-Rayed scene at approximate script-time 2:30. The total like percentage dropped from 52 to 38 per cent or 14 points in 22 seconds.

During the closing seconds of the Veterinary School scene and the opening moments of the ROTC scene, approximate script-time 16:45, the total like percentage figure dropped 10 points in 15 seconds. It is indicated that besides the change due to difference in feeling towards these two scenes, that there was negative feeling towards the closing moments of the Vet. School scene.

The transitional nature of all four major sharp decreases indicates: (1) The difference in positive feeling towards the different subjects of the scenes. (2) There has been marked success in maintaining a degree of constance of level of

interest within the scenes of the program.

The presence of pre-established audience feeling towards certain subjects is further strengthened by the fact that three of the four sharp drops occurred on transition to weak scenes. This was strongly stressed in the audience's explanations of reaction to the Home Economics and ROTC scenes. Dislike of the subject matter was stressed, but not quite so strongly, in the Discussion scene explanations.

Sex Agreement. With two major exceptions, the ROTC scene and the Home Economics scene, male and female dislike reactions seemed to follow a similar pattern throughout the program (Fig. 3). Both of these instances involved a preponderance of male dislike. The closing minute of the Discussion scene marked the only instance where female dislike exceeded male dislike, and their dislike percentage was only 3 per cent above that of the male for this period (Table 1).

The freshman female audience seemed more conservative than the male in dislikes recorded. The Discussion scene marked the only instance of the program where the percentage of girls registering a dislike reaction exceeded $12\frac{1}{2}$ per cent. Boys exceeded this figure at 10 intervals throughout the program.

With one major and two minor exceptions there was very close agreement in male and female like reactions throughout the program (Fig. 2). The major exception was in reaction to the Home Economics scene (script-time 12:15-13:40). The male like percentage averages 33 per cent and the female 50 per cent

for this scene. Males explaining found the subject of this scene unappealing.

The first minor difference in liking was noted between the script-times of 7:45 and 9:15 during the Physics, Science, and Technical Journalism scenes. The girls like reactions averaged below that of the boys during this interval. Lastly, the girls showed less liking for lathe work and welding (10:56-11:16 script-time) than the boys.

All three exceptions seem to follow the pattern of accepted masculine-feminine interests (Tyler, 1947).

Overall Reactions. Analysis of overall degree of like and dislike reactions found at least 49 per cent of the audience reacting at all instances in the program, with the exception of the first four minutes and fifteen seconds of the showing (Fig. 1 and 4). It therefore follows that the neutral audience never exceeded 51 per cent (Fig. 4 and Table 2). The average percentage of the audience remaining neutral throughout the program was approximately 40 per cent. Excepting the opening minutes, the film could be considered as offering a marked degree of stimulation throughout.

From an overall point of view there was a continuing upward trend in audience liking from the start of the program to the beginning of the Home Economics scene at 12:13 script-time, (Fig. 1 and Table 1). Change of scene started a new trend of positive reaction. This trend reached its peak at approximately 18:30 script-time during a varsity football game.

This point also marks the beginning of a continuous decline in interest that reached its low during the discussion scene. Positive increase in interest occurs during the final scene and is very high (70%) at the close of the program.

SUMMARY AND CONCLUSIONS

Weak Scenes

The Discussion Class scene (script-time 22:10-24:30) stands out as the weakest portion of the film. This was the only segment of the film for which the percentage of audience dislike reactions exceeded the like reactions. (The like reactions averaged 26 per cent for this period, while dislikes were at 28 per cent). The audience found this scene boring and uninteresting. It expressed disinterest in the subject matter.

The Home Economics scene (script-time 12:15-13:40) would be judged the film's second weakest. The weakness of this scene could be mainly attributed to its low appeal to the male population which made up 68 per cent of the total audience.

Dave's discussion with his roommate (script-time 5:00-6:30) would be judged the film's third weakest scene. The average total like figure was 36 per cent, while the average dislike figure was 14 per cent. The audience found this scene brought "unhappy associations", was "unrealistic" and "poorly acted."

The ROTC scene, judged by the reaction of the audience, would have to be considered a weak scene. Total dislike reached

its second highest point in this scene (21 per cent). However, the dislike figure for the female audience never exceeded 5 per cent. Explanations show (Table 8) the great majority of male reactions to have been governed by their attitude towards being in ROTC. While high dislike was being registered by the male population, the total like percentage figure stayed in the 39 to 45 percentile range. As high school male seniors would not have experienced college ROTC, it is highly doubtful that their reaction to this scene would prove the same as that of the male audience tested.

Two of the four weakest scenes of the film used "discussion" as their central theme. This might indicate (1) the inherent low interest value in "discussion" scenes, and (2) the need of special care in the treatment of "discussion" scenes.

Strong Scenes

The Sports and Recreation scene (script-time 17:30-19:30) was unquestionably the strongest section of the film in terms of audience interest. The total like percentage figure reached its highest of the film (79 per cent) and the percentage of audience remaining neutral reached its lowest ebb (16 per cent) during this scene. Total dislike never exceeded 7 per cent and dropped to as low as 4 per cent.

The Civil Engineering scene (script-time 11:28-12:13), and the Alma Mater scene (script-time 27:45-28:45) would be ranked next in strength. These two scenes were too close in

strength to make comparative ranking advisable.

The Civil Engineering scene showed an average total like reaction of 66 per cent while average total dislike was only 6 per cent. This scene was by far the strongest of these scenes emphasizing academic subjects.

The final scene of the film, the Alma Mater scene, showed an average total like figure of 64 per cent. Average total dislike was only 16 per cent.

The Varsity Dance scene would be judged the fourth strongest scene of the program. The total like figure averaged 62 per cent in spite of an average total dislike of 13 per cent.

Recreational activities are the central theme of two of the film's four strongest scenes. While recreational activities show a tendency to give film scenes strong interest value, further research would be necessary to determine the degree to which scenes of this type further the main purpose of this film: To interest students in attending Kansas State College.

Sharp Rises in Dislike Reaction

The film's three major sharp rises in dislike reaction occurred on transition to the ROTC scene, the Discussion scene, and the Varsity Dance scene. The first two scenes mentioned were among the film's weakest scenes. The Varsity Dance scene followed the program's strongest scene.

The fact that all three major rises in dislike occur on transition, infers pre-established audience feeling towards certain subjects.

The film's sharpest rise occurred on transition to the ROTC scene. Dislike rose from 11 per cent to 21 per cent within a time lapse of 10 seconds.

The reaction figures showed occurrence of two minor sharp rises in dislike. These occurred during the scene in Dave's room (script-time 1:00-1:30) and at 25:37 script-time during the Fond Memories scene.

The rise in dislike occurring from 1:00-1:30 script-time was attributed in part to Dave's smoking of a pipe. Audience explanations (Table 8) show that 27 per cent of those explaining dislike, mentioned this fact. This rise reflects the influence that can be possessed by one inanimate object in determining audience reaction.

Sharp Decreases in Dislike Reactions

All three sharp major decreases in dislike reaction occurred during scene transition.

The two major drops occurred on transition from weak scenes: the ROTC and Discussion scenes (script-times 16:43-16:53 and 22:15-22:45).

The third sharp major drop occurred on scene transition within a general scene, the Varsity Dance (script-time 19:05-19:35). The transition was from conversation to dance music.

Transitions to the ROTC and Discussion scenes marked two of the film's sharpest rises in dislike. Transitions from these same scenes marks the film's two sharpest decreases in dislike.

This occurrence would seem to validate the negative audience reaction shown to these scenes.

Sharp Rises in Like Reaction

Two of the three major sharp rises in like reaction occurred on scene transition. Sharp rises occurred on transitions to the Civil Engineering scene (approximate script-time 11:30) and to the Sports and Recreation scene (approximate script-time 17:20).

The tendency for sharp rises in like reaction to occur on scene transition would seem to indicate strong pre-established feeling to subject matter. Weighing and testing audience feeling towards a subject before the final selection of the subject matter of scenes should result in stronger scenes. Knowledge of audience feeling towards a subject should prove of great value in producing a scene about this subject.

A third sharp rise occurred at approximately 2:13 script-time during the scene of Dave's arrival. An attractive girl appeared in conjunction with humorous narration. The rise seemed to denote the interest appeal of sex combined with humor. The audience of this study would probably react favorably to any well produced scene using this type of appeal.

Minor sharp rises occurred at 6:30 script-time when Dave blew dust off his book (Humor), and at 4:30 script-time when Dave found a flunk slip in his post office box (Suspense).

The minor sharp rises seemed to indicate quite normal reactions to accepted appeals.

Three of the four sharp drops occurred on transition to weak scenes. These drops, like the sharp rises, seem to denote strongly pre-established audience feeling towards certain subjects.

Level of Interest Within Scenes

All major sharp rises and decreases in like and dislike reactions occurred during transitions to separate scenes. The film was highly successful throughout in maintaining a marked degree of constancy in level of interest of individual scenes.

Sex Agreement as to Dislike Reaction

Male and female dislike reaction followed a surprisingly similar pattern throughout the program with two major exceptions: the ROTC scene (script-time 16:43-17:15) and the Home Economics scene (script-time 12:15-13:40). Male dislike was heavy for these scenes averaging 23 per cent and 17 per cent, while female dislike averages were 4 per cent and 5 per cent.

The members of the female audience seemed conservative in registering their dislikes. Boys exceeded a dislike figure of $12\frac{1}{2}$ per cent at 10 different intervals of the program. Girls exceeded this $12\frac{1}{2}$ per cent figure only once. The conservative nature of the female audience should be taken into consideration when considering the degree of dislike of a scene.

Sex Agreement as to Like Reaction

Male and female like reactions followed a very similar

pattern when one major and two minor exceptions. With these exceptions, the problem of the innate differences in the interests of male and female, was quite successfully handled.

The Home Economics scene (script-time 12:15-13:40) showed a slow increase in female interest while male interest was very low throughout. This was the only major difference in like reaction.

Minor differences were noted during the script-times of 7:45-9:15, and 10:56-11:16. Female interest lagged during the Chemistry and Physics scene and the Welding and Lathe Work scene. Male interest remained high during these scenes.

Explanation of Sex Disagreement

With the exception of the ROTC scene, all noticeable sex disagreements seemed to follow a pattern of accepted masculine-feminine interests (Tyler, 20).

Overall Success of Film

From an overall standpoint the film would seem to offer a marked degree of stimulation throughout. With the exception of the opening four minutes and fifteen seconds, 49 per cent of the audience was reacting at all instances in the program.

From an overall standpoint, the film might be judged as one of high audience acceptance. Total like reaction averaged 46 per cent throughout the film. Total dislike reaction averaged 10 per cent. The average percentage of the

audience remaining neutral was 44 per cent.

Overall Value of Study

It is important to note that the conclusions drawn from an evaluation study of a single program such as "What of Tomorrow" apply only to this particular film. Generalizations to other programs would fall in the category of untested hypotheses.

Studies of this type might prove of scientific value in contributing testable hypotheses, which may lead to the development of principles.

A strong contribution of a study of this nature lies in its value as a form of applied research.

If such an analysis as this could be conducted while the program was in its preliminary version, subject to flexibility, maximum value might be obtained. Through revising and re-testing, a far more effective presentation might be obtained than would probably result from a completed program accepted without change in its original form.

Appraisal of Method

The main function of the Program Analyzer is to get appraisal of reaction to specific content. In applying results to a specific purpose, such as interesting students in attending Kansas State, further study would be necessary to determine correlation between "Interest in a program about Kansas State"

and "Interest in attending Kansas State."

The main advantage of the analyzer method is that it affords a continuous indication of points and periods of high and low interest about which the audience can be questioned. This is greatly superior to the retrospective reaction obtained through the use alone of questionnaires and interviews conducted after the program's showing. By combining analyzer results with a questionnaire-interview, insight can be obtained as to reasons for audience reaction to specific scenes on which there is high agreement.

Results of the Whan Analyzer method can be tested for reliability by repeating the test on homogeneous populations. Results can be tested for validity by retesting a program with a recommended change or changes included in the program.

Summary of Major Conclusions

The Discussion Class scene was the weakest portion of the film. The Home Economics scene would be judged the film's second weakest portion. Dave's Discussion with his Roommate and the ROTC scenes would both be judged weak scenes.

The Sports and Recreation scene was the strongest portion of the program. The Civil Engineering scene and the Alma Mater scene would be ranked next in strength. The Varsity Dance scene would be judged the program's fourth strongest scene.

The weak acceptance of the scenes of "discussion" type might indicate low interest in and the need of special care

in treatment of scenes of this nature.

Recreational activities show a tendency to give portions of the film greater interest value.

The male and female audiences were very similar in likes and dislikes. The film was almost equally successful in maintaining the interest of both sexes. The female members of the audience were more conservative than the male members in registering their dislike of the film. This factor should be weighed when considering the degree of dislike of the film.

The film was highly successful throughout in maintaining a marked degree of constancy in level of interest of individual scenes. From an overall standpoint, the film seemed to offer a marked degree of stimulation throughout and might be judged a film of high audience acceptance.

Weighing and testing audience feeling towards a subject before the final selection of the subject matter of the scenes should result in a stronger production of this type film. Knowledge of audience feeling towards a subject should prove of great value in producing a scene about this subject. To receive the greatest practical value from a study of this type, the program should still be changeable so it can be revised and retested.

This study may prove of scientific value in contributing testable hypotheses which may lead to development of principles. A strong contribution of a study of this nature lies in its value as a form of applied research.

ACKNOWLEDGMENT

The author wishes to express his sincere appreciation to Dr. Forest L. Whan, Professor of Speech, for his inspiration and guidance in the carrying out of this research.

Grateful acknowledgment is made to the faculties of the English and Speech Departments of Kansas State College for their valuable assistance in arranging for students to be tested.

The operation of all mechanical equipment used in testing the audiences for this study was carefully supervised by Don Whan, a major in the electrical engineering curriculum at Kansas State. The author is deeply indebted to Mr. Whan for his able and willing assistance.

The film and the projector used to show "What of Tomorrow" were loaned to the author by Mr. Max Milbourn, Director of Public Service, of Kansas State College.

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APPENDICES

Appendix A

DIRECTIONS TO GROUP

(Delivered orally before each showing of film)

In all probability, an experiment of this nature is a new experience for the majority of you present. My name is Len Marx, and it is my job to unveil a little of the mystery in the atmosphere.

Each of you found a metal gadget at your seat when you came into the room. This gadget is designed for holding in your left hand. The red tape is held facing you. Will everybody now cup their left hand around their gadget. (Use front row gadget for demonstration) See, I grasp my left hand around the gadget -- the red tape is visible. Now bring it forward to your body about waist high, sort of like you would hide some cribbing notes so the professor can't see them. Good! Now take your right hand and hold the lever at the top. Try moving it back and forth.

It works just like the signs you see on the board in the front of the room. When you push it to the right it registers, "I like". When you push it to the left it registers, "I do not like". Leaving the lever in the middle means, "I feel that I neither like nor dislike this portion of the program.

Now, we will practice while the machine is being adjusted. Remember, if "I like", I switch to the right and hold the lever here as long as I like what I am watching. If "I do not like", I switch to the left and hold the lever here as long as I do not like what I am watching. When I feel that "I neither like nor do not like", a portion of the program I am watching, I leave the lever in the middle.

Now, everybody switch their lever to the right and hold. This means "I like". Release your lever. Everyone switch their lever to the left and hold. This means "I do not like". Release your lever. Your lever in the center, as it is now, means "I neither like nor do not like".

As a final word I would like you to understand that your neighbor's reaction is unimportant. Each of us here will react differently to portions of the program. The experiment is

designed to be interested only in your reactions as an individual.

We're about ready to start, _____ (Switch on Analyzer on hearing music from amplifier.) Begin!

Instructions for filling in questionnaire

Our chart shows us how you as an audience have reacted to the film you have just seen. Each of you has been given a printed form. This form has numbered spaces for "I Like" on one side of the paper, and spaces for "I Do Not Like" on the opposite side of the paper.

We are now going to ask for your assistance in further analyzing this film. We will take a given scene from the picture. If this was a scene in which you feel your switch registered "I Like", try to explain the reason for your feeling, in the properly numbered blank on your form. A word, a phrase, or a sentence is all that is necessary.

The scene, (Give scene and exact description of it) shows an "I Like" recording of _____ persons on the chart. This means that _____ of us here felt that we liked this scene. If you feel that you were one of these _____ people, please write in the line numbered _____ on your form, in a word, a phrase, or a sentence why you feel you liked this particular scene. Thank you.

Appendix A

Form 1 - Questionnaire

_____ High School
_____ Town
_____ Major

"I LIKE"

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____

Form 1. (cont.)

"I DON'T LIKE"

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____

Appendix B

Table 1. The "Like" and "Dislike" reactions by eighths of minutes.

LIKE								DO NOT LIKE							
Time	Boys		Girls	Total		Boys	Girls	Total		Boys	Girls	Total			
	Raw	%	Raw	%	Raw	%	Raw	%		Raw	%	Raw	%		
0	0	0	000	1	005	0	000			2	005	0	0	0	000
	1	30	077	6	033	36	063			15	038	0	0	15	026
	2	34	087	9	049	43	075			17	043	3	016	20	035
	3	34	081	12	065	46	080			28	072	4	022	32	056
	4	66	167	23	125	89	153			17	043	2	011	19	033
	5	92	234	33	179	125	214			20	051	4	022	24	042
	6	102	260	37	201	139	241			28	072	6	033	34	059
	7	109	278	43	232	152	262			26	067	5	027	31	054
	8	109	278	41	222	150	260			27	069	13	071	40	070
1	1	106	271	44	239	150	260			45	115	9	049	54	094
	2	112	286	53	288	165	287			51	130	11	060	62	108
	3	117	299	59	320	176	306			52	133	13	070	65	113
	4	114	292	61	332	175	304			58	148	14	076	72	125
	5	115	294	66	358	181	314			70	179	10	054	80	138
	6	117	299	57	310	174	302			64	164	5	027	69	120
	7	120	307	61	332	181	314			54	138	6	033	60	104
	8	131	335	70	380	201	349			53	135	8	044	61	106
2	1	148	378	77	418	125	217			52	133	7	038	59	103
	2	168	432	83	451	151	262			51	130	6	033	59	099
	3	210	537	91	495	301	524			27	069	4	022	31	054
	4	204	522	93	505	297	517			26	067	6	033	32	056
	5	189	484	87	473	276	480			43	110	9	049	52	090
	6	181	463	70	381	251	438			47	120	11	060	58	101
	7	160	409	58	315	218	379			62	159	19	103	81	141
	8	155	396	67	364	222	386			49	125	13	070	62	108
3	1	177	450	67	364	244	424			52	133	7	038	59	103
	2	170	434	67	364	237	413			42	107	8	044	50	087
	3	165	422	64	348	229	398			56	143	7	038	63	110
	4	153	391	61	332	214	372			64	163	18	098	82	142
	5	142	363	62	337	204	354			57	145	14	076	71	124
	6	137	351	65	353	202	352			48	123	10	054	58	101
	7	136	348	66	359	202	354			52	133	7	038	59	103
	8	140	358	74	402	214	372			56	143	8	044	64	111

Table 1. (cont.)

DO NOT LIKE														
Time	LIKE						DO NOT LIKE							
	Boys			Girls			Boys			Girls			Total	
	Raw	%	Raw	%	Raw	%	Raw	%	Raw	%	Raw	%	Raw	%
4	1	136	348	76	413	212	368	60	153	9	049	69	120	
	2	129	330	70	331	199	346	57	146	11	060	68	118	
	3	137	351	75	407	212	368	60	153	10	054	70	122	
	4	133	340	80	435	213	370	66	169	18	098	84	146	
	5	143	366	84	456	227	396	58	148	12	065	80	139	
	6	150	383	90	489	240	418	48	123	9	049	57	099	
	7	164	419	91	495	255	445	48	123	8	044	56	097	
	8	158	404	84	456	242	422	53	135	8	044	61	106	
5	1	159	407	80	435	239	417	53	135	11	060	64	111	
	2	164	419	73	397	237	414	53	135	12	065	65	113	
	3	147	376	69	370	216	377	50	128	14	076	64	111	
	4	147	376	66	359	213	372	54	138	19	105	73	127	
	5	133	340	64	348	197	344	64	163	22	119	86	150	
	6	133	340	66	359	199	348	68	174	20	109	88	153	
	7	121	309	69	370	190	331	71	181	20	109	91	158	
	8	119	304	72	391	191	332	77	197	17	092	94	163	
6	1	121	309	76	413	197	343	72	184	19	103	91	158	
	2	122	312	76	413	198	345	72	184	18	098	90	156	
	3	131	335	74	402	205	366	74	189	19	103	93	162	
	4	124	317	89	484	213	371	70	178	16	087	86	150	
	5	159	407	91	495	250	436	68	174	11	060	79	137	
	6	157	401	94	511	251	438	53	135	7	038	60	140	
	7	192	491	97	527	289	504	45	115	7	038	52	090	
	8	194	496	101	549	295	515	43	110	9	049	52	090	
7	1	208	532	101	549	309	539	30	077	9	049	39	068	
	2	208	532	101	549	309	539	28	072	10	054	38	066	
	3	214	547	101	549	315	550	34	087	5	027	39	068	
	4	203	519	99	538	302	527	25	064	4	022	29	050	
	5	183	468	83	451	266	464	38	097	7	038	45	078	
	6	189	484	76	413	265	462	42	107	13	070	55	095	
	7	194	496	75	408	269	470	43	110	13	070	56	097	
	8	195	498	67	364	262	457	50	128	17	092	67	117	
8	1	196	501	61	334	257	448	48	123	19	103	67	117	
	2	190	486	65	353	255	444	49	125	17	092	66	115	
	3	190	486	68	370	258	450	49	125	18	098	67	117	
	4	191	488	66	359	257	448	52	133	21	114	73	127	
	5	188	481	69	370	257	448	43	110	12	065	55	095	
	6	187	478	73	397	260	453	37	075	8	044	45	078	
	7	194	491	77	418	271	473	35	089	9	049	44	076	
	8	197	504	80	435	297	518	34	087	9	049	43	075	

Table 1. (cont.)

		LIKE						DO NOT LIKE					
		Boys		Girls		Total		Boys		Girls		Total	
Time	Raw	Raw	%	Raw	%	Raw	%	Raw	%	Raw	%	Raw	%
9	1	201	514	81	441	282	492	36	092	14	076	50	087
	2	192	488	91	495	283	494	36	092	7	038	43	075
	3	203	519	93	506	296	517	36	092	5	027	41	071
	4	196	499	85	462	281	490	38	097	7	038	45	078
	5	201	514	89	484	290	505	39	100	8	044	47	082
	6	212	543	96	522	308	537	39	089	5	027	40	070
	7	210	528	99	538	309	539	42	107	3	016	45	078
	8	218	557	90	489	308	537	43	110	5	027	48	083
10	1	220	563	84	456	304	530	39	100	6	033	45	078
	2	209	525	77	418	286	498	41	105	9	049	50	087
	3	199	509	74	402	273	476	38	097	7	038	45	078
	4	197	501	82	446	279	487	36	141	7	038	43	075
	5	214	548	98	530	312	544	35	089	4	022	39	068
	6	210	528	107	581	317	553	39	110	4	022	43	075
	7	195	498	100	543	295	515	40	102	5	027	45	078
	8	207	530	87	413	294	513	39	100	3	016	42	073
11	1	213	545	87	473	300	523	40	102	8	044	48	083
	2	211	540	79	429	290	505	38	097	8	044	46	080
	3	214	550	80	435	294	513	35	089	9	049	44	076
	4	207	530	101	548	308	537	41	105	5	027	46	080
	5	221	565	116	630	337	571	41	105	3	016	44	076
	6	243	596	120	651	363	633	38	097	4	022	42	073
	7	264	676	131	711	395	690	32	082	3	016	35	061
	8	279	740	137	744	416	725	24	061	4	022	28	049
12	1	279	715	124	673	403	701	23	059	3	016	26	045
	2	238	610	110	597	348	605	28	072	4	022	32	056
	3	215	550	106	575	321	558	34	089	8	044	42	072
	4	143	366	103	559	246	429	38	123	12	065	60	104
	5	138	353	86	461	214	372	56	143	11	060	67	117
	6	144	469	88	478	232	404	56	143	15	081	71	123
	7	132	340	91	495	223	388	62	159	12	065	74	129
	8	133	340	97	527	230	400	59	151	6	033	65	113
13	1	130	333	101	548	231	402	63	161	4	022	67	117
	2	124	317	108	587	232	404	59	151	4	022	63	110
	3	119	304	109	592	228	396	61	156	3	016	64	111
	4	110	281	99	538	209	364	66	169	8	044	74	129
	5	130	331	92	500	222	386	58	148	9	049	67	117
	6	140	358	85	462	225	392	53	135	8	044	61	106
	7	176	450	77	418	253	442	52	133	7	038	59	103
	8	196	501	78	424	274	478	51	130	6	033	57	099

Table 1. (cont.)

Time	LIKE							DO NOT LIKE						
	Boys		Girls		Total			Boys		Girls		Total		
	Raw	%	Raw	%	Raw	%		Raw	%	Raw	%	Raw	%	
14	1	208	532	85	462	293	510	51	130	6	033	57	099	
	2	203	520	88	478	291	507	47	120	6	033	53	092	
	3	203	520	93	506	296	514	47	120	7	038	54	094	
	4	201	511	92	500	293	510	46	118	6	033	52	090	
	5	187	478	88	478	275	478	38	097	6	033	44	076	
	6	183	468	88	478	271	473	35	089	7	038	42	072	
	7	192	491	87	473	279	487	33	084	9	049	42	072	
	8	186	475	87	473	273	476	35	089	8	044	43	075	
15	1	173	440	86	467	259	452	34	087	11	060	45	078	
	2	173	440	85	462	258	450	42	107	11	060	53	092	
	3	188	481	90	489	278	480	43	110	9	049	52	090	
	4	189	484	100	543	289	503	42	107	9	049	51	089	
	5	187	478	95	516	282	490	41	105	10	054	51	089	
	6	189	484	96	522	285	495	40	102	9	049	49	085	
	7	188	481	100	543	288	500	42	107	9	049	51	089	
	8	195	498	102	553	297	518	42	107	10	054	52	090	
16	1	200	512	111	602	311	541	40	102	8	044	48	083	
	2	200	512	109	592	309	537	37	095	9	049	46	080	
	3	199	510	100	549	300	523	35	090	9	049	44	076	
	4	167	427	96	522	263	457	49	125	6	033	55	095	
	5	158	404	82	446	240	417	56	143	6	033	62	108	
	6	154	394	79	429	233	405	73	186	6	033	79	136	
	7	163	417	84	456	247	429	114	292	9	049	123	212	
	8	168	430	86	467	254	441	105	268	7	038	111	195	
17	1	176	450	90	489	265	463	68	192	6	033	74	129	
	2	173	442	91	495	264	460	65	182	6	033	71	123	
	3	185	474	99	538	284	494	36	092	6	033	42	073	
	4	223	571	105	570	328	570	32	082	5	027	37	064	
	5	231	592	100	543	331	575	31	079	8	044	39	068	
	6	212	543	107	581	319	554	36	092	4	022	40	070	
	7	207	530	114	619	321	558	34	087	4	022	38	066	
	8	236	604	117	635	353	613	32	082	5	027	37	064	
18	1	262	659	115	624	377	661	27	069	5	027	32	056	
	2	286	732	118	641	404	702	25	064	4	022	29	050	
	3	298	763	130	706	428	745	24	061	3	016	27	047	
	4	302	774	134	728	436	759	21	054	2	011	23	040	
	5	305	781	140	760	445	774	23	059	2	011	25	043	
	6	308	789	147	799	455	791	23	059	3	016	26	045	

Table 1. (cont.)

Time		LIKE						DO NOT LIKE					
		Boys		Girls		Total		Boys		Girls		Total	
		Raw	%	Raw	%	Raw	%	Raw	%	Raw	%	Raw	%
18	7	295	755	147	799	442	769	22	056	6	033	28	049
	8	293	750	146	793	439	763	23	059	5	027	28	049
19	1	272	695	147	799	419	729	21	054	5	027	26	042
	2	260	665	148	804	408	710	37	095	3	016	40	070
	3	254	650	149	810	403	701	51	130	6	033	57	099
	4	230	588	141	766	371	645	56	143	8	044	64	111
	5	219	560	139	756	358	622	59	151	11	060	70	120
	6	218	557	126	684	344	598	69	176	18	098	87	152
	7	217	555	123	668	340	591	66	169	18	098	84	146
	8	199	510	126	684	325	565	57	146	17	092	84	129
20	1	205	525	126	684	331	575	47	120	14	076	61	106
	2	194	496	117	635	311	542	36	092	11	060	47	082
	3	182	466	117	635	299	520	32	082	7	038	39	068
	4	207	520	117	635	324	563	30	077	6	033	36	061
	5	200	512	124	673	324	563	35	089	4	022	39	068
	6	199	510	122	662	321	558	48	123	5	027	53	092
	7	180	461	119	646	299	520	42	107	6	033	48	084
	8	168	430	114	619	282	490	33	084	5	027	48	066
21	1	162	415	86	467	248	395	35	089	7	038	42	073
	2	157	402	84	456	241	419	39	100	9	049	48	084
	3	155	397	81	441	236	410	40	102	10	054	50	087
	4	151	386	87	473	238	414	41	105	12	065	53	092
	5	150	384	90	489	240	417	43	110	11	060	54	094
	6	169	434	94	511	263	457	35	089	8	044	43	075
	7	212	543	100	543	312	543	28	072	6	033	34	059
	8	222	568	104	565	326	567	27	069	10	054	37	064
22	1	186	476	96	522	282	491	33	084	5	027	38	066
	2	150	384	90	489	240	418	44	113	5	027	49	085
	3	134	343	79	429	213	370	48	123	4	022	52	090
	4	131	335	79	429	210	364	59	151	3	016	62	108
	5	121	308	81	441	202	351	69	176	10	054	79	137
	6	115	194	68	370	183	316	85	217	19	103	104	181
	7	111	284	68	370	179	312	91	231	24	130	115	200
	8	101	258	65	353	166	288	105	268	25	136	130	226
23	1	104	266	64	348	168	292	99	252	25	136	124	216
	2	106	271	57	310	163	283	111	282	35	190	146	254
	3	104	266	56	304	160	278	118	302	40	218	158	274
	4	105	269	55	299	160	278	120	307	42	228	162	282

Table 1. (cont.)

		LIKE						DO NOT LIKE					
Time :		Boys :		Girls :		Total :		Boys :		Girls :		Total :	
		Raw :	% :	Raw :	% :	Raw :	% :	Raw :	% :	Raw :	% :	Raw :	% :
23	5	108	276	58	315	166	288	118	302	40	218	158	274
	6	105	269	57	310	162	282	113	290	39	212	152	264
	7	102	261	56	304	158	275	117	300	41	223	158	274
	8	100	256	54	294	154	268	120	307	43	234	163	284
24	1	94	241	54	298	148	257	123	315	43	234	166	288
	2	98	252	48	262	146	253	116	296	47	255	163	284
	3	103	264	44	239	147	254	106	271	54	294	160	278
	4	106	271	39	212	145	251	92	235	52	283	144	250
	5	91	233	37	201	128	222	75	192	44	239	111	193
	6	96	246	37	201	133	231	68	174	38	207	106	184
	7	102	261	40	217	142	247	62	159	34	185	96	167
	8	116	297	56	304	166	288	52	133	21	114	73	127
25	1	136	348	70	380	206	358	47	120	12	065	59	103
	2	146	374	83	451	229	399	44	112	9	049	53	092
	3	155	397	92	500	247	430	52	133	6	033	58	101
	4	150	384	98	533	248	432	49	125	5	027	54	094
	5	159	408	94	511	253	440	48	123	6	033	54	094
	6	153	392	97	527	250	436	54	138	8	044	62	108
	7	154	394	90	489	244	425	64	164	8	044	72	125
	8	151	386	94	511	245	427	45	115	8	044	53	092
26	1	190	486	105	571	295	515	39	102	10	054	49	085
	2	202	517	123	668	325	566	32	082	6	033	38	066
	3	201	515	129	701	330	574	34	087	4	022	38	066
	4	193	494	129	701	322	560	39	102	5	027	44	076
	5	186	479	132	717	318	553	42	107	5	027	47	082
	6	187	505	128	696	325	566	41	105	5	027	46	080
	7	178	456	124	673	302	527	45	115	7	038	52	090
	8	170	435	111	602	281	490	42	107	6	033	48	083
27	1	165	423	103	559	268	467	36	092	7	038	43	075
	2	165	423	98	532	263	458	37	095	14	076	51	089
	3	169	433	98	532	276	465	36	092	10	054	46	080
	4	169	433	101	549	270	470	35	089	8	044	43	075
	5	185	474	103	559	288	501	33	084	8	044	41	071
	6	194	497	122	662	316	550	38	097	6	033	44	076
	7	214	548	131	712	345	600	37	095	5	027	42	073
	8	216	553	136	739	352	613	31	079	5	027	36	063

Table 1. (concl.)

		LIKE						DO NOT LIKE					
Time		Boys		Girls		Total		Boys		Girls		Total	
		Raw	%	Raw	%	Raw	%	Raw	%	Raw	%	Raw	%
28	1	218	558	132	717	350	609	33	084	3	016	36	063
	2	226	579	141	766	367	639	32	082	2	011	34	059
	3	238	609	152	826	390	678	23	059	2	011	25	044
	4	241	617	162	880	403	700	23	059	2	011	25	044

Appendix B

Table 2. The "Neutral" reactions by eighths of minutes.

Time		NEUTRAL				NEUTRAL				NEUTRAL		
		Boys	Girls	Total		Boys	Girls	Total		Boys	Girls	Total
		%	%	%		%	%	%		%	%	%
0	0	000	000	000								
	1	885	967	911	4	499	538	512	8	376	563	435
	2	870	935	892		524	559	535		389	555	441
	3	841	913	864		496	539	510		389	532	433
	4	767	864	814		591	467	484		379	527	425
	5	715	799	764		486	479	465		409	565	457
	6	668	766	700		494	462	483		427	559	449
	7	655	741	684		458	461	458		415	533	451
	8	652	707	670		461	500	472		409	516	407
1	1	614	712	650	5	417	505	472	9	394	483	421
	2	584	652	605		459	537	473		420	467	431
	3	468	610	581		435	554	512		389	467	412
	4	560	592	571		446	537	501		404	500	452
	5	591	588	548		492	533	506		386	472	413
	6	571	662	578		526	532	499		368	451	393
	7	560	445	682		419	511	511		365	446	383
	8	517	576	545		499	517	505		333	484	380
2	1	443	544	680	6	507	495	499	10	337	511	392
	2	404	516	639		504	489	499		370	533	415
	3	423	483	422		476	495	472		394	560	446
	4	343	462	427		505	429	479		358	516	438
	5	383	478	430		419	445	447		363	448	388
	6	404	559	461		464	451	422		372	397	372
	7	522	682	480		394	435	406		400	430	407
	8	536	566	506		394	402	395		370	511	414
3	1	417	598	473	7	391	402	393	11	353	483	394
	2	459	592	500		396	397	395		363	527	415
	3	435	614	492		366	424	382		361	516	411
	4	446	570	486		417	440	423		365	425	383
	5	492	581	522		425	511	458		330	354	353
	6	526	513	547		409	517	443		307	327	294
	7	419	603	543		394	522	433		242	273	249
	8	499	554	517		373	544	426		199	234	226

Table 2. (cont.)

		NEUTRAL					NEUTRAL					NEUTRAL		
Time		Boys	Girls	Total			Boys	Girls	Total			Boys	Girls	Total
		%	%	%			%	%	%			%	%	%
12	1	226	311	254	16		386	354	376	20		355	240	319
	2	318	381	339			393	359	383			412	305	376
	3	361	381	360			400	402	401			452	327	412
	4	511	376	467			448	445	448			403	333	371
	5	504	473	511			453	521	475			399	305	369
	6	488	441	473			420	538	459			367	311	350
	7	501	440	483			291	495	359			432	321	396
	8	509	440	487			302	495	364			486	354	444
13	1	506	430	481	17		358	478	408	21		496	495	532
	2	532	391	486			375	472	417			498	495	497
	3	540	392	493			434	429	433			501	505	503
	4	450	418	507			347	403	366			509	462	494
	5	519	451	497			329	413	357			506	451	489
	6	507	494	502			365	397	376			477	445	468
	7	417	544	455			383	359	376			385	424	398
	8	369	543	423			314	338	323			363	381	369
14	1	338	505	391	18		272	349	283	22		440	451	443
	2	360	489	401			204	337	248			503	484	497
	3	360	456	392			176	278	208			544	549	540
	4	365	467	400			173	261	201			514	555	528
	5	425	489	446			160	229	183			516	505	512
	6	443	484	455			152	185	164			589	527	503
	7	425	478	441			199	168	182			485	500	488
	8	436	483	449			191	180	188			474	511	486
15	1	473	473	470	19		251	174	229	23		482	516	492
	2	453	478	458			240	180	220			447	490	463
	3	409	462	430			220	157	200			432	478	448
	4	409	408	408			269	190	244			424	473	440
	5	417	430	421			289	184	256			422	467	438
	6	414	429	420			267	218	250			441	478	454
	7	412	393	392			276	234	263			439	473	451
	8	395	393	392			344	224	306			437	472	448

Table 2. (concl.)

: <u>NEUTRAL</u> :				: <u>NEUTRAL</u> :				: <u>NEUTRAL</u> :				
Time		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total		
		%	%	%	%	%	%	%	%	%		
24	1	444	468	455	26	412	375	400	28	358	267	328
	2	452	463	462		401	299	374		339	223	302
	3	465	467	468		398	277	360		332	163	278
	4	494	505	499		404	272	364		324	109	256
	5	575	560	585		414	256	365				
	6	580	592	585		390	277	354				
	7	580	598	586		429	289	383				
	8	570	582	585		458	365	427				
25	1	532	555	539	27	485	403	458				
	2	514	500	509		482	392	453				
	3	470	467	469		475	414	455				
	4	491	440	474		478	407	455				
	5	469	456	466		442	397	428				
	6	470	429	456		406	305	374				
	7	442	467	440		357	261	327				
	8	499	445	481		368	234	324				

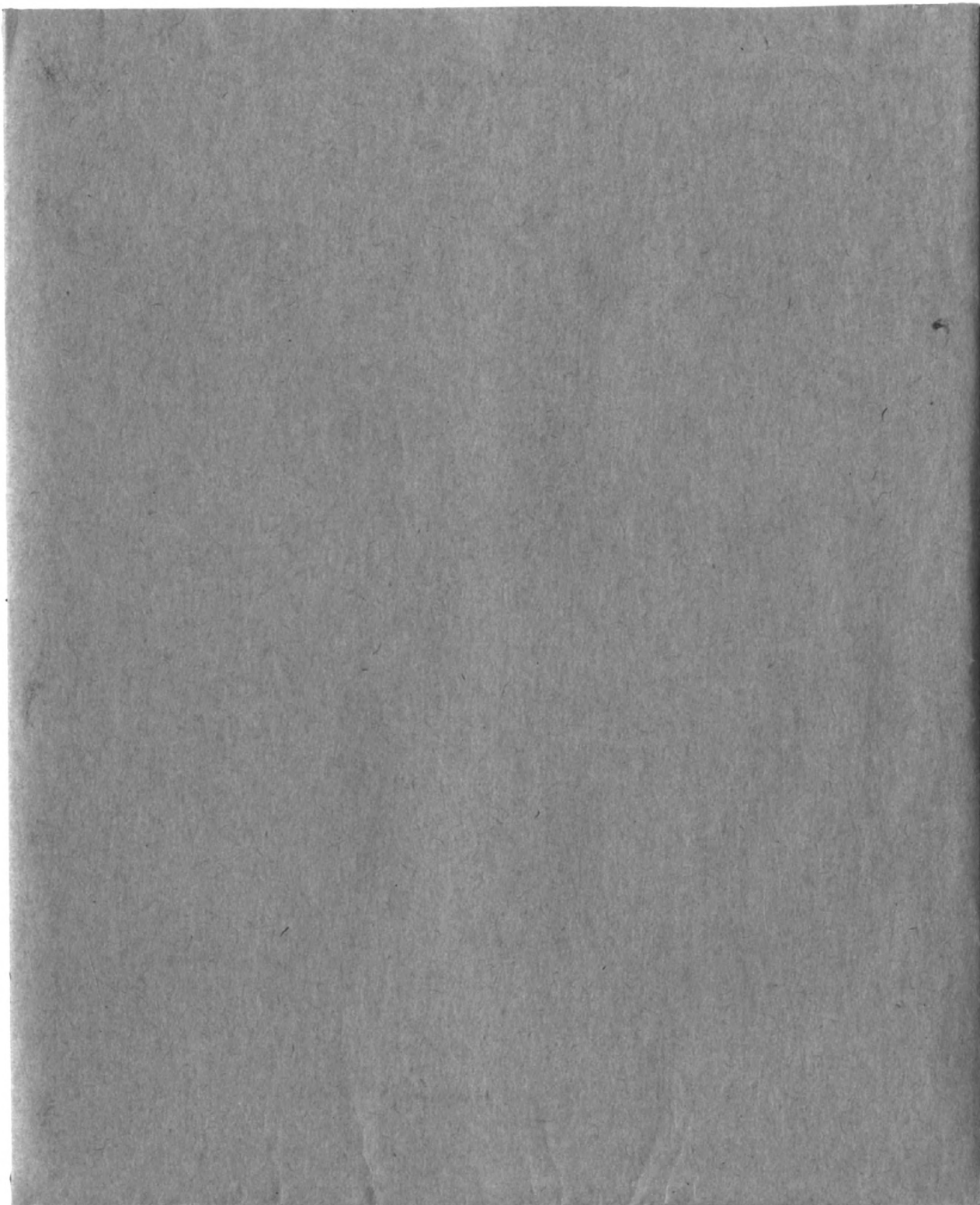
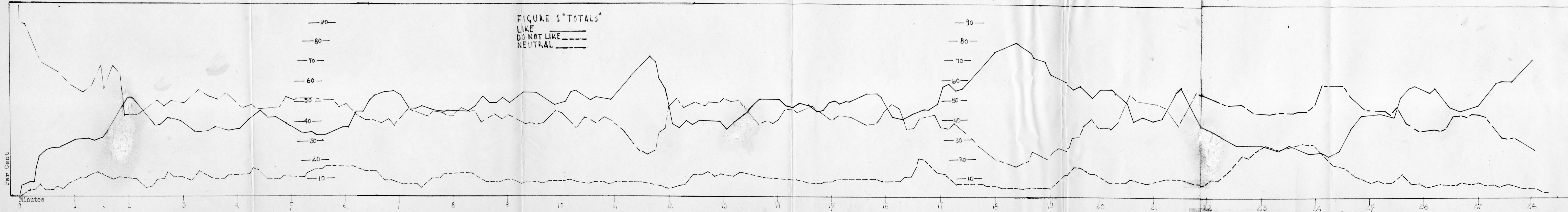


Fig. 1. Line graph of total audience reactions by minutes as to percentage denoting a "like" reaction, percentage denoting a "dislike" reaction, and as to percentage that remained "neutral."



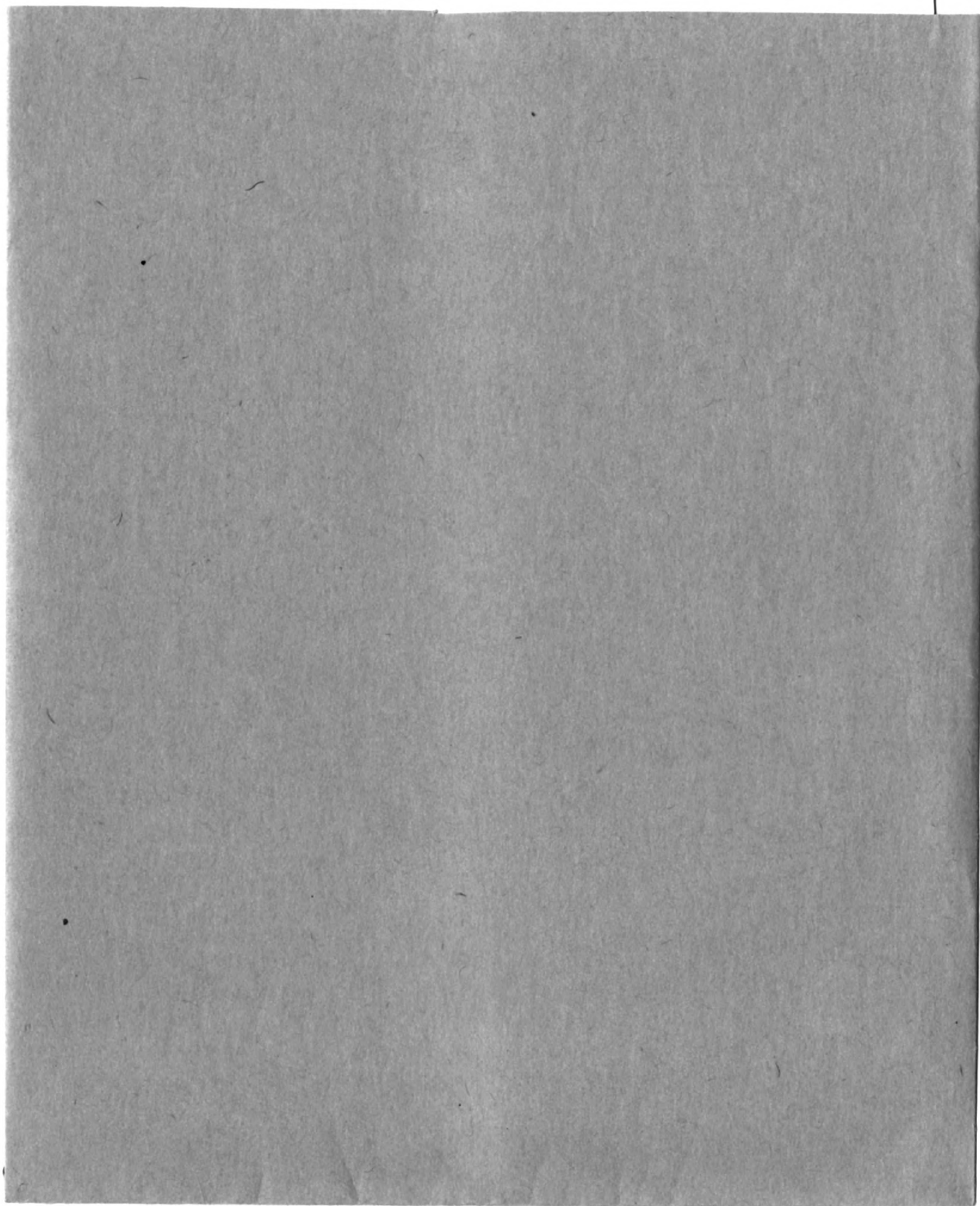
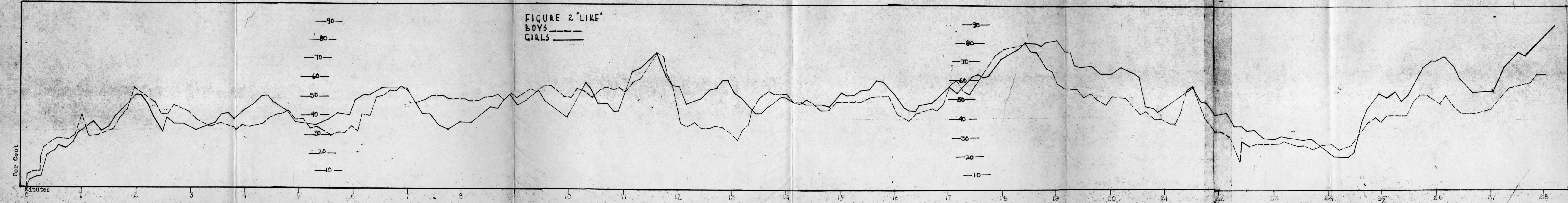


Fig. 2. A line graph comparison in percentage of the "like" reaction, by minutes, of the audience of boys compared with the audience of girls.



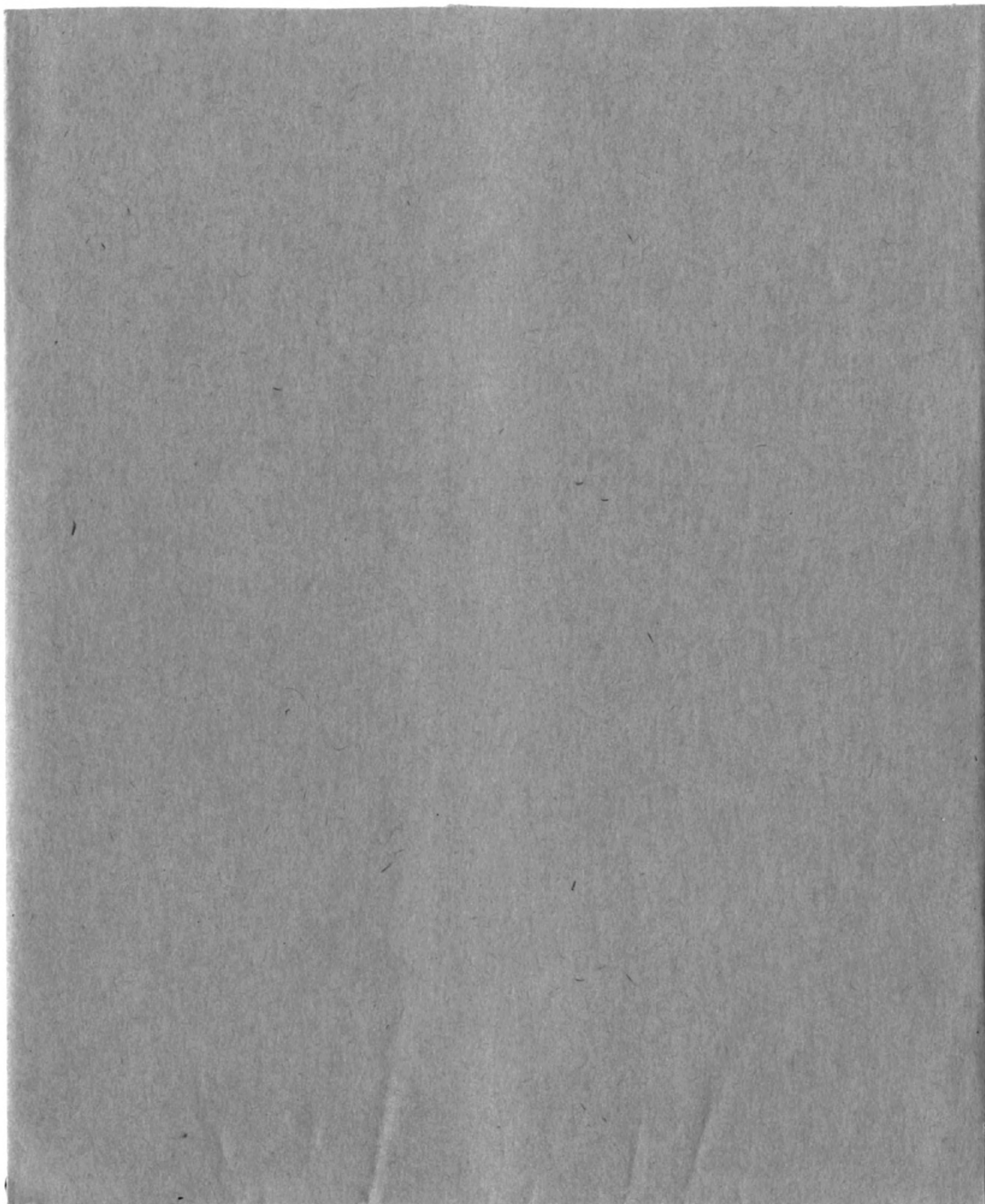
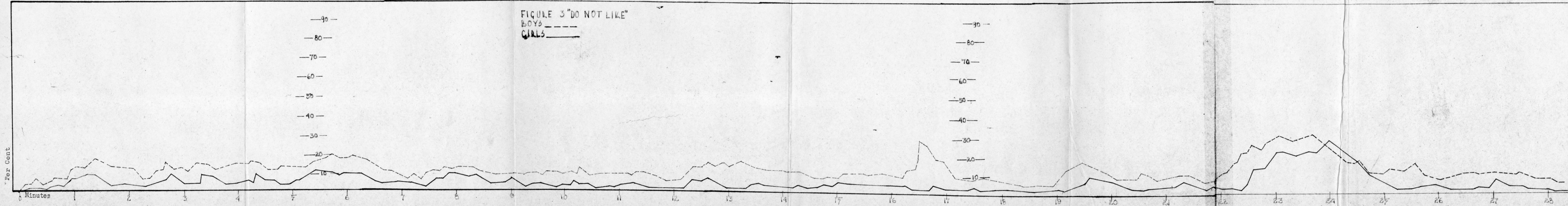


Fig. 3. A line comparison in percentage of the "dislike" reaction, by minutes, of the audience of boys compared with the audience of girls.



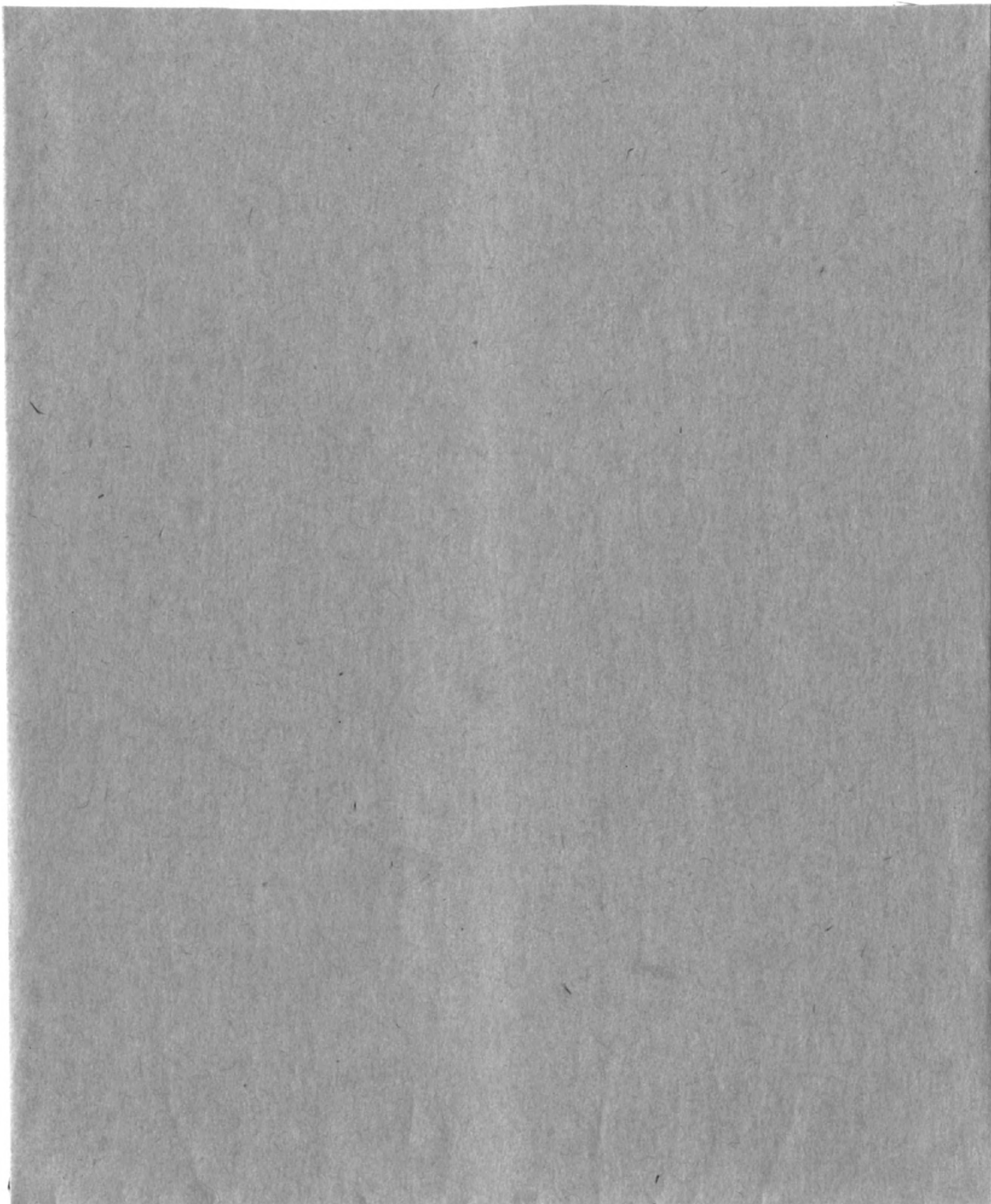
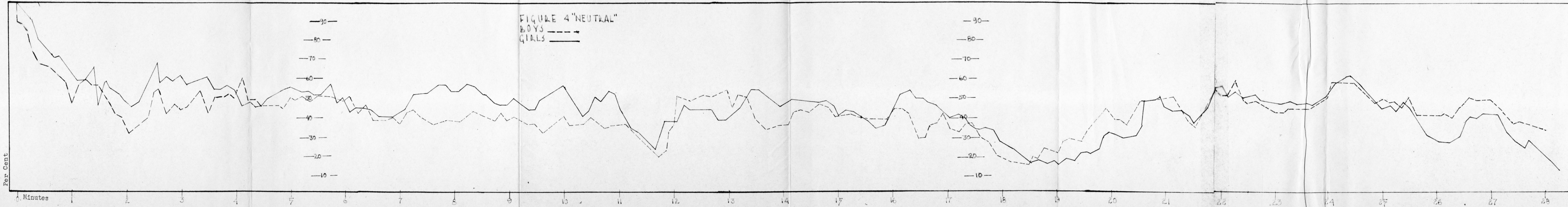


Fig. 4. A line comparison in percentages of the "neutral" reaction, by minutes, of the audience of boys compared with the audience of girls.



Appendix C

Table 3. Reaction to toggle switch of 91 boys and 124 girls

Reaction	Boys Number	%	Girls Number	%
Did not bother me	59	65	102	82.0
Did not bother me but for- got to use when interested	10	11	2	1.5
Did not bother me, but might in other type of show			3	2.5
Bothered me	22	24	16	13.0
Bothered me, at first only				1.0

Table 4. Kansas State College freshmen. Registration by sex, for fall and spring semester.

		1949-1955		Ratio
Year	:	Males	Females	Male to Female
1949-50	Fall	1,226	476	2.6
	Spring	1,000	416	2.2
1950-51	Fall	1,161	393	3.0
	Spring	992	367	2.7
1951-52	Fall	1,023	425	2.4
	Spring	915	409	2.2
1952-53	Fall	1,314	489	2.7
	Spring	1,164	456	2.6
1953-54	Fall	1,258	495	2.5
	Spring	1,174	464	2.5
1954-55	Fall	1,256	469	2.7

Table 5. Groups questioned for written explanation of reaction to specific scenes.

	Group* :				Size of
	Designation :				Total Audience
	1 :	2 :	3 :	4 :	Questioned
<hr/>					
Boys					
<u>Scene for which "like" reaction was analyzed</u>					
Danforth Chapel	x	x			200
Students edit & presses at work				x	91
TV acting & TV engineering				x	91
Arch. students work on model	x	x			200
Civil engineering	x			x	200
Livestock judging		x			100
Baking				x	91
Dave in step bull session	x	x	x		291
 <u>Scene for which "do not like" reaction was analyzed</u>					
Dave smokes pipe in room	x	x	x		291
Dave's discussion with roommate			x		100
Clothing design class	x	x	x		291
ROTC			x	x	191
Dave and Ruth dance			x	x	191
Discussion	x	x	x	x	391
<hr/>					
<hr/>					
	Group** :				Size of
	5 ; 6 : 7 : 8 :				Audience
<hr/>					
Girls					
<u>Scene for which "like"</u>					
Dave X-Rayed	x				50
Dave bored in class			x	x	74
Dave at P.O. for flunk slip	x				50
Dave wondered what roommate would think			x		50
Dave blows dust off book	x	x	x		124

Table 5. (concl'd.)

	Group**				Size of Audience
	5	6	7	8	
TV acting & TV engineering			x		50
Arch. students work on model		x			60
Civil Engineering	x	x	x	x	184
Baking	x				60
Rote		x			50
Varsity sports		x	x		100
Varsity dance	x	x	x	x	184
Alma Mater	x				60
Scene for which "do not like"					
Dave and Ruth dance	x				60
Discussion	x	x	x	x	184

* Separate showings of the film were made for four groups of boys. Groups 1, 2 and 3, were each composed of 100 boys. Group 4 was composed of 91 boys.

** Separate showings of the film were made to four groups of freshman girls. Group 5 was composed of 60 girls. Groups 6 and 7 were each composed of 50 girls. Group 8 was composed of 24 girls.

Table 6. Comparison, by audience total, of "peak reaction" to a specific scene (as recorded by Wham Analyzer) with number of written explanations of these reactions received.

Scene for which "like" reaction was analyzed	Peak Reaction	Explanations Received	Percent Explaining
<u>Boys</u>			
Danforth	129	121	94%
Students edit & presses at work	42	37	88
TV acting & TV engineering	49	40	82
Arch. students work on model	106	91	86
Civil engineering	135	135	100
Livestock judging	52	42	81
Baking	27	28	104
Dave in step bull session	185	196	106
<u>Girls</u>			
Dave X-rayed	32	40	125
Dave bored in class	52	57	110
Dave at P.O. for flunk slip	24	31	129
Dave wondered what roommate would think about slip	28	32	114
Dave blows dust off book	69	87	126
TV acting & TV engineering	25	18	72
Arch. students work on model	35	32	120
Civil engineering	137	133	97
Baking	30	21	70
ROTC	15	19	127
Varsity sports	86	75	87
Varsity dance	147	134	91
Alma mater	54	55	102
<u>Scene for which "do not like"</u>			
<u>Boys</u>			
Dave smoke s pipe in room	70	73	104
Dave's discussion with roommate	22	20	91
Clothing design class	48	65	123
ROTC	93	94	101
Dave and Ruth dance	48	53	110
Discussion	123	133	108
<u>Girls</u>			
Dave and Ruth dance	9	12	133
Discussion	57	80	140

Table 7. Analysis of written explanations for
"Like" reactions to a specific scene.*

Explanation	Boys Number	%	Girls Number	%
<u>Danforth Chapel scene (2:25-2:30)</u>				
Beauty and symbolism	46	37		
Religion as part of school life	34	28		
Like church	23	19		
Good feeling	11	9		
Familiar	4	4		
Fellowship	3	3		
<u>X-Ray scene (2:31-2:45)</u>				
Reliving actual experience			30	76
Helpful to students			3	7
Educational			3	7
Interesting			2	5
Humorous			2	5
<u>Dave bored in class (3:45-3:55)</u>				
True to college life			28	49
Humorous			11	19
Like me			13	24
Girl already pinned			3	5
Shows need of study			2	3
<u>Dave at P. O. for flunk slip (4:15-4:30)</u>				
Typical reaction			14	45.
Humorous			13	42
Like me			2	7
Showed importance of required course			2	7
<u>Dave wondered what roommate would think (4:50-5:05)</u>				
Typical reaction			17	53
Like me			10	31
Human nature study			4	13
Humorous			1	3

* Percentage may total more than 100 per cent because of multiple replies.

Table 7. (contd.)

Explanation	Boys		Girls	
	Number	%	Number	%
<u>Dave blows dust off back (6:12-6:40)</u>				
Typical			45	52
Humorous			37	42
Like me			11	12
Importance of study			7	9
Human nature study			3	4
Interesting			1	1
<u>Students edit and presses at work (7:35-9:11)</u>				
Educational	11	30		
Like "Collegian"	11	30		
Interesting	5	11		
Interest in field	4	11		
Learning while doing	3	8		
Action	2	5		
Like machinery	1	2		
<u>TV acting and TV engineering (9:41-10:00)</u>				
Interest in field	10	25		
Educational	9	22	3	17
Like electronic equipment	9	22		
New and interesting	9	22	2	11
Shows up-to-dateness of				
Kansas State	3	8	2	11
Romance			7	39
Typical			3	17
Humorous			1	6
<u>Arch. students work on model (10:38-10:44)</u>				
Interesting houses	24	26	9	21
Interest in field	21	23	12	28
Like new and future homes	16	18	5	12
Educational	12	13	13	31
Want home of own in future	11	12		
Shows learning by doing	7	8	1	3
Different			2	5
<u>Civil Engineering (11:28-12:15)</u>				
Humorous	68	50	51	38
Sex interest	27	20	5	4
Typical of frosh boy	18	14	65	48
Interest in field	7	5		

Table 7. (contd.)

Explanation	Boys		Girls	
	Number	%	Number	%
<u>Civil Engineering (contd.)</u>				
Like me	6	4		
They do it to me			6	5
Educational	5	4		
Interesting	3	2	6	5
Working outside	1	1		
<u>Livestock Judging (14:01-14:15)</u>				
Interest in field	15	36		
Raised around livestock	12	28		
K-State famous for	7	17		
Like animals	5	12		
Shows practical training	3	7		
<u>Baking (15:05-15:30)</u>				
Appetizing	18	65	5	21
Interest in field	2	7	4	14
Educational	2	7	9	43
Interesting	2	7	4	19
Learn by doing	2	7		
Shows off Milling Dept.	2	7		
<u>ROTC (16:43-17:15)</u>				
Educational			7	37
Like men			7	37
Interested why boys hate ROTC			5	26
Typical			2	11
Added variety			2	11
<u>Dave in bull session (17:53-18:04)</u>				
Relaxation and friendship	98	50		
Like to learn from bull sessions	67	34		
Typical	23	12		
Familiar	8	4		
<u>Varsity sports (18:15-19:02)</u>				
Interested in sports			35	47
Arouses school spirit			18	24
Exciting			7	10
Reality			6	8
Entertaining			5	7
Shows us winning			4	5

Table 7. (concl.)

Explanation	Boys		Girls	
	Number	%	Number	%
<u>Varsity dance (19:03-19:20)</u>				
Realism			55	41
Enjoy social life			33	25
Like to dance			28	21
Like the music			7	5
Romance			5	4
Interesting			4	3
Humorous			2	1
<u>Alma mater (27:45-28:32)</u>				
Fitting close			13	24
School spirit			9	16
Moving scene			7	12
Felt like I was there			6	11
Music			6	11
Scenery			6	11
Photography			5	9
Good summary			3	6

Table 8. Analysis of written explanations for "Dislike" reaction to a specific scene.*

Explanation	Boys		Girls	
	Number	%	Number	%
<u>Dave smokes pipe (1:00-1:30)</u>				
Unrealistic	18	25		
Boring	13	18		
Don't like pipe	11	15		
Don't like college boy smoking	9	12		
Poor acting	5	7		
Don't like Dave	4	6		
Don't like Dave's bright tie	3	4		
Too sentimental	4	6		
Don't like Dave's clothes	2	3		
Poor dialogue	2	3		
Lengthy	1	1		
Don't know	1	1		
<u>Dave's discussion with roommate (5:05-5:40)</u>				
Unhappy associations	9	45		
Unrealistic	5	25		
Poor acting	4	20		
Dull	2	10		
<u>Clothing design class scene (12:45-12:34)</u>				
Not an appealing subject	46	78		
Poor acting	5	9		
Lack of style in clothes	5	9		
Unrealistic	3	5		
<u>ROTC scene (16:43-17:15)</u>				
Don't like ROTC	50	53		
Unrealistic	21	22		
Takes too much time for credit you get out of it	16	17		
Bad memories	6	7		
Lengthy	1	1		

* Percentages may total more than 100 per cent because of multiple replies.

Table 8. (concl.)

Explanation	Boys		Girls	
	Number	%	Number	%
<u>Dave and Ruth dance (19:30-20:00)</u>				
Unrealistic - corny	28	53	8	67
Poor dialogue	12	22	3	25
Poor acting	10	19	2	17
Distinction drawn between frosh and upperclassmen			3	25
Dull	3	6		
Lack of appealing girls at Kansas State	2	4		
Romantic mush	2	4	12	129
Don't like dancing	2	4		
Don't like cutting in	2	4		
Don't like Dave	2	4		
<u>Discussion (22:08-24:45)</u>				
Boring	47	34	43	54
Unrealistic	33	24	12	19
Don't like subject matter	21	16	4	16
Poor acting	14	11	1	1
Lengthy	10	8	20	47
Useless	5	4		
Propaganda	2	2		
Don't know	1	1		

Appendix D

Table 9. Time analysis of film, "What of Tomorrow", as
66 to scenes and sequences.

Scene	: Time :	Scene	:Time
I OPENING		VI (cont.)	
1. K. State Presents	7	5. CU of roomie	6 :07
2. Title	13	6. CU of Dave & roomie	
3. Producer	15	(Dave picks up book)	6:12
4. A Centron Production	22	VII DAVE THE STUDENT	
II DAVE'S EXIT		1. Back in class	6:41
1. Car pulls up	23	2. In lab	6:55
2. Girl & boy in car	28	3. Front step bull	
3. Boy leaves car-	40	session	7:01
III DAVE'S ROOM		4. Anderson background	7:08
1. Packing	48	5. Anderson steps	7:24
2. CU Dave smoking	59	VIII CHEM & PHYSICS	
IV DAVE ARRIVES		1. Chem prof experiments	7:31
1. Arrives in car	1:44	2. Student	7:43
2. Sees Willard Hall	2:05	3. Physics student	
3. Girl walks east		experiments	7:52
campus	2:15	4. Prof at measuring inst	8:03
4. Class break by		5. CU of recording inst.	8:08
shop building	2:21	6. Isotope lab	8:13
5. Danforth Chapel	2:26	7. Radioactivity equip.	8:26
6. Dave X-rayed	2:30	IX JOURNALISM-RADIO-TV	
7. Dave takes Apti-		1. Journalism students	
tude Test	2:46	edit	8:35
8. Dave chats with		2. Presses at work	8:53
counselor	2:57	3. Student announces	9:12
V DAVE'S CULTURAL CLASS		4. Radio instructor	9:25
1. In class	3:15	5. Girl spins record	9:33
2. CU of prof.	3:24	6. TV acting	9:41
3. CU of Dave	3:34	7. TV engineering	9:51
4. CU of Dave bored	3:42	8. Back to TV acting	9:55
5. CU of Dave & Girl		9. Reflector scene	10:01
seated next to him	3:55	10. CU of reflector	10:10
6. Dave takes exams	4:05	X ARCHITECTUAL & MECHANICAL	
7. Dave at P.O.	4:13	1. Student engrs study	
8. Dave walks campus	4:33	steam	10:21
VI DAVE'S DISCUSSION		2. CU model house	10:30
WITH ROOMMATE		3. Architecture students	
1. Dave & roomie in		work on model	10:38
their room	4:58	4. Life drawing class	10:44
2. CU of Dave	5:25	5. Girl paints mural	10:52
3. CU of roomie	5:40	6. Student welds	10:56
4. CU of roomie & Dave	5:52	7. Lathe work	11:03

Table 9. (contd.)

Scene	: Time :	Scene	: Time
X (contd.)			
8. Instructor uses drill	11:08	2. Vet examines dog	15:47
9. CU of shaper	11:16	3. Calf led to operating room	15:54
XI CIVIL ENGINEERING			
1. Students approach	11:28	4. Calf on operating table (placement)	16:00
2. Rodmen takes position	11:42	5. Surgeon operates	16:13
3. CU of transit operator	11:50	6. Well cow	16:23
4. Circle of rodman	11:58	7. Vets leave quarters	16:29
5. Circle of girl	12:02	XV ROTC	
6. Long shot of rodman and girl	12:06	1. AA control	16:43
XII HOME ECONOMICS			
1. Girls dorm	12:13	2. AA loading	16:53
2. Clothing design class	12:24	3. Rifle loading	17:00
3. Family size kitchen	12:35	4. Motor instruction	17:08
4. Dining room	12:45	XVI SPORTS & RECREATION	
5. Girl paints design	12:53	1. Class break west of Holton Hall	17:19
6. Int. Dec. class	13:00	2. Girls baseball	17:30
7. CU of pottery making	13:07	3. CU of girl battery	17:36
8. Children swinging	13:14	4. Boy reads under tree	17:40
9. Institutional kitchen	13:24	5. Dave in step bull session	17:53
10. CU of food trays	13:33	6. Boys' baseball game	18:04
XIII AG-DAIRY-MILLING			
1. Ag class in field	13:43	7. Track-high jump	18:10
2. Livestock judging	14:01	8. Shooting baskets	18:15
3. Cows in stall	14:12	9. Fieldhouse huddle	18:21
4. CU student feeding cows	14:21	10. CU basketball coach	18:27
5. K-State diary	14:25	11. Gridgers enter stadium	18:30
6. Milk bottling machine	14:30	12. Kickoff & runback	18:36
7. Flour sifter	14:33	13. Pass play	18:48
8. Instr. & student at milling machine	14:52	14. Crowd cheer	19:02
9. Students knead dough	15:05	XVII VARSITY DANCE	
10. Students at shaper	15:15	1. Orchestra	19:05
11. Baked break	15:23	2. Couples dancing	19:08
XIV VET SCHOOL			
1. Small animals await treatment	15:34	3. Dave and Ruth dance	19:30
		4. General dance scene	20:06
		5. CU of orchestra	20:13
		XVIII ROMANCE	
		1. Dave in phone booth	20:25
		2. Dave & Ruth stroll campus	20:32
		3. Relaxing under tree	20:42

Table 9. (concl.)

Scene	:Time :	Scene	: Time
XIX CAMP WOOD			
1. Panorama	20:58	11. Students return from lunch	26:24
2. Discussion Group	21:06	12. Lawn scene anderson	26:31
3. Group CU	21:15	13. Students on rock wall	26:40
4. CU Prexy	21:30	XXII TIME TO LEAVE	
5. CU Dave & 2 members	21:38	1. Dave smokes pipe in room	26:48
6. Swimming & Canoeing	21:49	2. Roomie in doorway	26:57
7. Volleyball	21:58	3. Dave exits room	27:05
8. Horseback in stream	21:03	4. Dave & roomie leave house front	27:25
XX DISCUSSION CLASS			
1. Class in progress	22:08	5. Dave looks back at house	27:33
2. CU instructor	22:28	6. Chorus sings	27:44
3. CU 3 students	22:33	7. Full view Anderson	28:00
4. CU blue sweater girl	22:46	8. Class break front Ag building	28:08
5. CU Dave & gal on end	22:56	9. Class break side auditorium	28:15
6. CU red sweater girl	23:18	10. Engineers survey	28:20
7. CU end table girl	23:30	11. Full shot Ag building	28:08
8. Side shot end of table	23:45	12. Cloud Scene Anderson	28:32
9. CU of blue sweater	24:17	13. THE END	28:42
10. Class picture	24:31		
11. CU of Dave	24:45		
XXI FOND MEMORIES			
1. CU Dave on campus stroll	25:00		
2. Dave in class	25:18		
3. Dave leaves Anderson	25:27		
4. Dave chats with prof	25:36		
5. Dave in discussion group	25:45		
6. Dave smokes pipe in room	25:55		
7. Frat house homecoming	26:03		
8. Homecoming football crowd	26:08		
9. Dave & Ruth in rec center	26:13		
10. Dave & Ruth on steps	26:19		

Table 10. Time analysis of "What of Tomorrow" film
script as to minutes and seconds.

Script	: Time
*****	15
***** GIRL: He must not be ready, I don't see him. BOY: I guess I'll have to go in and get him. You know he really hatesto leave this place. *****	30
*****	45
*****	1:00
DAVE: Well, I guess this is the end of the line. Today is the day I begin on my own. This is the day I thought would never get here four years ago. Four years, four years of college.	1:15
--Boy, what a lot of water has run under the bridge in that four years. What a difference it has made in my life. Sometimes I wonder what would have become of me, if I hadn't come here to college.	1:30
I owe so much to this place. I honestly hate to leave it. I remember how I was when I came up here four years ago. I was just a kid. I hardly knew which way was up. ***	1:45
*** NARRATOR: Yes, Dave Parker was just a kid when he came to college. He felt strange and a little confused in the unfamiliar surroundings. And, he wondered if he'd ever be able to find his way around	2:00
without the little guide book. **** As Dave explored the campus on his own for the first time, he began to understand why Kansas State	2:15
is famous for its beauty. *****	2:30
* But the college has its own plans for new students like Dave, who soon found himself taking a physical examination at the Student Health Service - the service that cares for the health of each individual student	2:45
***** Next he was given a series of aptitude tests - tests designed to search out hidden talents - to discover what he could do best. Guidance experts explain	3:00
the results of these teststo the students - helping them to choose the right course of study - perhaps con- firming a choice they have already made. *****	3 :15
NARRATOR: After the induction and enrollment period, Dave began to attend classes - began the serious work of college. He found many of the faculty at Kansas State	3:30
to be nationally known authorities on the subjects they teach. ** Learning was a privilege under the guidance of such people. *** There was one class	3:45

Table 10. (contd.)

Script	: Time
however, that Dave did not care much about. This course was listed in the college catalog as broadening and cultural; but, that was not Dave's opinion of it. He wouldn't even get interested in the girl who sat next to him	4:00
Almost before he knew it, Dave was taking five weeks examinations, *** at least he was sitting through them.	
*** When the strain of exams was over, Dave felt great, but when he checked for his mail in the college post office - it happened - it was a small yellow envelope - and inside, a flunk slip ****	4:15
Dave's grade was below passing in the one course he didn't like. As Dave walked home he began to wonder if he should have come to college in the first place, maybe he should have gone to work instead. Still	4:30
he had good grades in most of his subjects - if they'd just let a guy take the courses he liked. Then he'd forget this other subject. Dave wondered what his roommate, Jack, would think about his getting a low grade slip. ****	4:45
DAVE: How about that? *****	5:00
ROOMMATE: Well,	5:15
are you surprised? DAVE: No, I guess not. I got all A's and B's in my other subjects though - it's just that one. ROOMMATE: Well, how come you never study this course? DAVE: Oh, it is so darn dull.	5:30
Art and culture and all that stuff makes me sick. ROOMMATE: You know, that's what I used to think. But I don't think so any more. DAVE: What do you mean? ROOMMATE: Well, you know my brother Bill?	
DAVE: Yeh, the one that is a chemist. ROOMMATE: Yeh, well when	5:45
Bill came to college, he was interested in chemistry. He made straight A's in all his chemistry courses when he was in college, but he didn't pay attention to many of the other courses. DAVE: Well, so what? ROOMMATE: When he got out of college he knew a lot about chemistry, but he didn't know much about anything else.	6:00
Consequently, his education was one-sided, and he admits it today. DAVE: You mean you actually need this stuff after you graduate. ROOMMATE: All I know is what Bill tells me.	6:15
But I'm going to get all I can out of this school while I'm here. You never know when you'll need it. DAVE: Well, I guess there is just one thing for me to do --	6:30



Table 10. (contd.)

Script	: Time
---NARRATOR: Dave found that studying helped - it helped a lot. He discovered that the more he knew about the course, the better he liked it, and his grade improved rapidly. So Dave's education began at Kansas State - began in the classroom ---in the laboratory ---	6:45
and in fellowship with other students. Dave learned that within these stately halls lies opportunity for all those who wish to fashion a future for themselves, a future made richer by intelligent preparation. So Kansas State is dedicated not to any particular group, but to all who wish to learn.	7:00
For those with a technical turn of mind, Kansas State offers courses in all the sciences	7:15
Courses supply the background for exciting new ventures in research. Physics students learn new techniques, new methods, new applications of fundamental principles ---	7:30
using delicate measuring devices and sensitive recording instruments. In the Kansas State Isotope Laboratory students handle	7:45
radioactive materials by remote control, with the watchful eye of the geiger counter insuring personal safety. While advanced students study	8:00
new and beneficial uses of radioactivity, in other parts of the campus entirely different activities are in progress. Here Journalism students prepare an issue of Kansas State's daily newspaper - The Collegian. By actually doing	8:15
the work, students get practical experience in all phases of newspaper publication. When the last deadline is met the big presses begin to roll bringing news of the coming campus elections,	8:30
the latest All-School Party, of national and world affairs to the people of Kansas State.	8:45
Also bringing campus and world news to K-Staters is a complete radio station operated entirely by students. *****	9:00
Under the guidance of experienced instructors, students learn the radio business	9:15
from station management to spinning the platters. ***** Kansas State was one of the first colleges to own and operate a television	9:30
transmitter. Here students get actual experience in putting a TV program on the air, while would be engineers learn the technical problems of this amazing new science. ***	9:45
	10:00

Table 10. (contd.)

Script	Time
Other engineers experiment with high frequency radio waves - a science closely allied to radar and television - a science involving strange, tiny antennae and queer dishpan reflectors.	10:15
***** Our mechanical engineers study the relationship of steam and electrical energy.	10:30
Houses of the future with an eye to efficiency and pleasing composition are designed by students in architecture. ***** Since the architect must know art, his curriculum includes Life Drawing and other essential art courses.	10:45
***** Engineers learn the practical aspect of their profession in welding	11:00
---and in the work. *** Using giant machines that multiply man's skill and strength a hundred fold	11:15
----And there is always the freshman engineer in his new found world of cosines and tangents he spreads out to meet the next obstacle in his path, a field problem in surveying. Quickly the rod man is dispatched to his position --	11:30
Quickly the instrument is set up and levelled - adjustments must be precise, readings must be exact, for accuracy is the keynote of the engineer. Well-11-11 In addition to providing attractive scenery for the freshmen engineers, girls at K-State have other more serious activities. Many of them live in the beautiful new residence halls in a friendly home-like environment for their life away from home.	11:45
*** One of the many courses open to women students is in the School of Home Economics recognized as one of the best in the nation. Some choose courses in Clothing Design and Textile Selection - others prefer the culinary arts, practicing them in modern family-sized kitchens --- knowing that their most severe critics will be the students who eat the food they prepare. --- Some women students prefer the artistic side of Home Economics - painting, interior decoration --- or the ancient art of pottery making. ** Others study Child Development	12:00
	12:15
	12:30
	12:45
	13:00
	13:15

Table 10. (contd.)

Script	: Time
and Guidance, realizing that in the child of today lies the hope for tomorrow. Some specialize in Institutional Management, learning the secrets of preparing food in large quantities.	13:30
Wholesome, attractive food for the hospitals, restaurants, and hotels of the future. Other students at Kansas State	13:45
find their interest in the production of foods. Classes in Agronomy make frequent trips to the college farms inspecting crops at close range. *****	14:00
In livestock judging Kansas State teams always range high in national competition. The college owns one of the finest dairy herds in the United States.	14:15
Dairying students become familiar with the entire chain of events from feeding the cattle to bottling the milk in the college dairy. ***	14:30
Unusual is the Department of Milling Industry - the only one of its kind in the world. Here the sifters play their part in the production of high grade flour from Kansas wheat. --- (Noise)	14:45
The students become familiar with every part of the entire milling process, checking the results of every step along the way. * (Noise)	15:00
In the experimental baking laboratory, students test the flour they have milled. Dough is mixed mechanically and sent through dividers, rounders, and shapers, before being baked.	15:15
** the result - tempting, golden brown loaves, a glowing reward for these students - the millers and bakers of tomorrow	15:30
*** The School of Veterinarian Medicine with its hospital and clinic serves the entire Midwest. Here young and old alike bring their pets for treatment, knowing that their animal friends will receive the best in medical care. ***** The clinic is run like any modern hospital - a typical patient is led to the operating room - placed	15:45
on a large operating table which lifts the patient into position. ***** Deftfully, skillfully	16:00
the surgeon does his work, assisted by advanced students. In a few days the patient has completely recovered. Yes, Bossy, we've already heard about your operation. After six years of intensive	16:15
study these young men are graduated to a career of Vet	16:30

Table 10. (contd.)

Script	Time
Medicine. They protect our nation's health, through the health of its animals - a truly worthwhile vocation.	
*** Kansas State College plays its part in national defense through its ROTC unit, rated excellent by military authorities. Students use modern defense equipment in their studies ** and compete in marksmanship	16:45
on the indoor rifle range. *** These young men may become reserve commissioned officers in the Army or Air Force, qualified to answer their nation's call if the need arises.	17:00
** Yes, there's a wealth of opportunity at Kansas State - opportunity for learning and living - for building the future, and opportunity for recreation. Some students enjoy intramural sports in which all may participate. Others, just like to spend a lazy afternoon under a tree with a good book.	17:30
*** Still others, like Dave Parker, find enjoyment in a bull session with friends. ***	17:45
Student interest runs high in competitive sports - baseball - track - Kansas State is famous for the basketball teams it has produced. The beginning of a big game in the new fieldhouse in an exciting moment for players and spectators - but the king of outdoor sports is football	18:00
-----Crowd Cheer-----	18:15
-----More Crowd Cheer-----	18:30
*** Not all the playing is done on the football field. At the varsity dances students relax and meet new friends	18:45
***** "May I cut in?" "Sure can." "Thank you."	19:00
"Thank you." "Hi!" "Hi!"	19:15
***** "S_y, you're a swell dancer." "Well, thank you, you're not so bad yourself. I might introduce myself, my name is Ruth Miller." "My name is Dave Parker, are you new here?" "Oh, no, I'm a sophomore, you didn't think I was a freshman, did you?" "Well, no, except that I haven't seen you around. Do you go to dances often?" "Well, as many as I can." "How about the varsity next Friday night, are you busy?" "I'm sorry, but I already have a date."	19:30
*****MUSIC***	19:45
***** NARRATOR: But a good man doesn't give up so easily. It wasn't the first phone call or even the second that got results, but before long Dave and Ruth	20:00
	20:15
	20:30

Table 10. (contd.)

Script	: Time
were seeing each other quite often. **** Dave found Ruth to be the kind of girl he'd always hoped to meet - vivacious, alert, interesting. She appeared more and more frequently in his dreams of the future. During his junior year, Dave was a delegate to the Student Planning	21:00
Conference at Camp Wood. Here in the atmosphere of a summer camp, student initiative takes the lead, as discussion groups examine a college policy that might be changed - a rule that needs revising -	21:15
a student problem that needs to be solved. As these young people work out college problems, college officials step aside. Even President McGinn	21:30
takes his place among the students. *** Dave was impressed by what a vital part the students themselves play in the administration of Kansas State College.	21:45
After the sessions are over, there is time for recreation, swimming and canoeing, volleyball, **	22:00
and horseback riding. *** During his senior year, Dave enrolled in one of the many courses in which students are encouraged to think for themselves. After reading	22:15
in such fields as science, government, literature, and philosophy, students attend class where they do most of the talking. The instructor guides the discussion.	22:30
"What I'm trying to say is: Nowadays life is a lot more complicated than it used to be. You not only have to know how to make a living, but, that's just the beginning." "Not only that,	22:45
but everything changes so fast. In the good old days you could live and let live, but it just isn't that easy any more." "So what?, everybody knows things are different nowadays. Anybody can see that. All I want to know	23:00
is what are we supposed to do about it?" "Well, Dave, I think it is up to us, the students. We have to educate ourselves to meet today's problems." "But, how are we going to do that? It looks like a pretty big job to me." "Sure, it's a big job, but	23:15
it's one we have to do." "And, if we don't do it, well what I mean is if we don't learn to make decisions ourselves the first thing we know somebody else will be making them for us." "That's right, Judy, and it seems to be that that's what we're doing right here.	23:30

Table 10. (contd.)

Script	Time
We've talked over lots of different ideas about government, some good and some not so good, and we all believe in democracy. Don't you think that that's in the right direction?" "Corrine, I think it goes further than just believing in democracy.	23:45
A person has to be aware of what's going on. He has to be able to understand what he hears and reads, and he has to be able to get his views across to other people." "All right, suppose I believe in democracy, and I know what is going on around me.	24:00
I know how to speak and write well. Does that make me a top-notch citizen?" "I don't think you can answer that. To me, one of the most important things is being able to work with other people." "Well, Don, don't you think we're learning to work in a group right now? After all, we listen to each other's opinions, proclaim at each other's theories, criticize our own ideas. I think we're learning to work together right here at Kansas State	24:15
** NARRATOR: Serious talk for a group of young people? Maybe, but students like these are making their way to a better understanding of their responsibilities as American citizens.	24:30
Dave found that he was intensely interested in this phase of his college work. He felt that he was really preparing himself for his place in the world of tomorrow. So after a few short years as an underclassman	24:43
Dave Parker found his college career drawing to a close and as time for graduation drew nearer, he began to realize how much college had come to mean to him. He felt that he was immeasurably better prepared, for the future. Better prepared not only because of his studies in classroom and laboratory, but because of his associations with other students -- real down to earth people	25:00
with whom it was easy to make friends. Because of his contact with the faculty -- men, women, of stature -- whom he could admire and respect. And because of the encouragement he received to think and judge for himself --to think clearly without prejudice. It seemed to Dave as though his most pleasant memories were of college days - of the Homecoming	25:15
	25:30
	25:45
	26:00

Table 10. (concl.)

Script	Time
Welcome for the Alumni and of the big Homecoming game, meetings with Ruth Miller in the Recreation Center,	26:15
or on the steps between classes, of students hurrying to class after the lunch hour	26:30
the hush that falls over the campus as classes begin, of the thousand and one things that every student knows about and never thinks about until it's almost time to leave.	26:45
**** " Hey, let's go." "O.K." ***	27:00
***** MUSIC *****	27:15
**NARRATOR: <u>And What Of Tomorrow?</u> To Dave Parker and others like him, tomorrow represents a challenge, a challenge to be met with the courage and determination born of	27:30
preparedness - the preparedness of real education - that final view of the college changed to hope for the future in the new life to come. ***	27:45
***** Singing of Alma Mater by Chorus *****	28:00
And so it is at Kansas State - young people come, stay a few short years and go, but carrying with them a recollection that ten thousand tomorrows	28:45
will fail to erase - a loyalty - a devotion - a reverence for Kansas State College - the alma mater	28:30
***** (singing of alma mater) *****	28:45
THE END	
***	28:48

KANSAS STATE COLLEGE
Manhattan, Kansas

C
O
P
Y

Office of Public Service

April 26, 1955

Dr. F. L. Whan
Radio and Television Section
Speech Department
C o l l e g e

Dear Dr. Whan:

We have been pleased to cooperate with Mr. Leonard S. Marx in his audience research project with the all-college film, "What of Tomorrow?"

We produced the film with one purpose in mind: to acquaint high school students with Kansas State College as a part of our over-all high school relations program.

We hoped there would be valuable by-products of this effort, such as increased interest in and a better understanding of the College by the alumni, teachers, and the public at large. We have been encouraged by the response.

However, until Mr. Marx undertook his master's project, we had no way of scientifically measuring the effectiveness of the film with the primary group for which it was produced. The results of his research will be most helpful, I'm sure, in assisting the College in producing more effective films in the future.

I should like to take this opportunity to thank Mr. Marx for his professional approach to this project, and to you for your wholehearted cooperation.

Sincerely,

/s/ Max W. Milbourn

Max W. Milbourn
Director of Public Service

A STUDY OF AUDIENCE REACTION TO THE
TELEVISION FILM "WHAT OF TOMORROW"

by

LEONARD SIMMONS MARX

B. B. A., Tulane University, 1941

AN ABSTRACT OF A THESIS

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

Department of Speech

KANSAS STATE COLLEGE
OF AGRICULTURE AND APPLIED SCIENCE

1955

"What of Tomorrow" is a color film production, produced primarily to interest high school students in Kansas State College.

This particular study was undertaken to analyze this film as related to the reactions of Kansas State College freshmen in an effort:

1. To determine the strong and weak portions of this production.
2. To find and evaluate the audience's reasons for liking or disliking specific portions of the program.
3. To compare and evaluate the separate reactions of the male and female segments of the audience.
4. To discover and evaluate the overall acceptance of the program.
5. To provide Kansas State College with qualitative information for use in producing future films.
6. To contribute a qualitative program analysis study of scientific worth.

No previous study of a program of comparative length to "What of Tomorrow", that was devoted primarily to a promotional purpose could be found.

The Whan Analyzer, a mechanical device which gives a continuous registering of the likes and dislikes, separately, as expressed by an audience for every instant of program viewing, was the basic tool used for the collection of data.

Immediately, at the end of each showing, the members of the audience were asked for their reasons for expressing like and dislike of specific portions of the program.

The Analyzer used in conjunction with the questionnaire-interview afforded first, a means of determining the portions of the program about which the audience was in high agreement, and secondly, a means of discovering the audience's reasons for the degree of like and dislike exhibited.

A total of 575 Kansas State College first semester freshmen, 391 boys and 184 girls comprised the test audience. On analysis, the sample seemed to some degree representative on a basis of the high schools in Kansas, the curriculum in which Kansas State freshmen were enrolled, and the breakdown by sex, of Kansas State College freshmen.

Separate analyses were made of the data from the questionnaires and the analyzer charts of the audience's expressed likes and dislikes. The questionnaire was then analyzed in conjunction with the data from the analyzer chartings.

Conclusions drawn from this study apply only to this particular film. Generalizations to other programs fall in the category of untested hypotheses.

The following were classified as the film's four weakest scenes:

1. Discussion Class
2. Home Economics
3. Dave's Discussion with Roommate
4. ROTC scene

The following were classified as the film's four strongest scenes:

1. Sports & Recreation
2. Civil Engineering

3. Alma Mater
4. Varsity Dance

The weak acceptance of the scenes of "discussion" type might indicate a low interest in and a need for special care in treatment of this type of "Discussion" scene.

Recreational activities show a tendency to give portions of the program greater interest value.

The male and female audiences were very similar in likes and dislikes.

The film was almost equally successful in maintaining the interests of both sexes.

The film was successful in maintaining a marked degree of constancy in level of interest of individual scenes.

The film would be judged a program of high audience acceptance.

Pre-testing and weighing of audience feeling towards a subject would prove of great value in the selection and production of scenes.

A strong contribution of a study of this nature lies in its value as a form of applied research. This study may prove of scientific value in contributing testable hypotheses which may lead to the development of principles.

